DOCUMENT RESUME

ED 233 956 SO 014 970

AUTHOR Highsmith, Robert J.; And Others
TITLE Analyzing Growth Policies of Developing Countries: A Resource Guide. Economics-Political Science Series.
INSTITUTION Joint Council on Economic Education, New York, N.Y.
SPONS AGENCY EXXON Corp., New York, N.Y.; J.M. Foundation, New York, N.Y.; Lilly Endowment, Inc., Indianapolis, Ind.
REPORT NO JCEE-327
PUB DATE 83
NOTE 70p.
AVAILABLE FROM Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036 ($4.50).
PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Developed Nations; *Developing Nations; *Economic Development; *Economics Education; Food; *Interdisciplinary Approach; Learning Activities; Political Issues; *Political Science; *Population Growth; Resource Materials; Secondary Education; Social Change

ABSTRACT

Background material for teachers and learning activities for secondary students dealing with the growth policies of developing countries are included in this guide, one in a series intended to help students learn to view society and its problems from both economic and political perspectives. Following the guide's introduction, which provides a general explanation of the conceptual framework used throughout the series for analysis of public issues, there are two major sections. The first section, "Topic Overview," presents teachers with background information on economic and political issues that confront developing countries. The second section offers six self-contained learning activities. Students learn to distinguish between developed and developing nations, use statistical indicators to measure economic development, analyze scenarios and make economic decisions that affect their lives, describe changes that countries must undergo to increase food production, and analyze and discuss factors affecting population growth. All student handouts are included. (RM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED233956

ECONOMICS-POLITICAL SCIENCE SERIES (EPS)

Analyzing Growth Policies of Developing Countries: A Resource Guide

Robert J. Highsmith
Lyman H. Heine
Phyllis Bailey

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.
X Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
Ester Moskowitz
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

SP014970

1983

Joint Council on Economic Education

JCEE Checklist No. 327

About the Authors

Robert J. Highsmith is director of the Economic Literacy Council of California.

Lyman H. Heine is a professor of political science at California State University–Fresno.

Phyllis Bailey is coordinator of social studies in the Baltimore County public school system.

The Joint Council on Economic Education is extremely grateful to the members of its Publications Committee who reviewed the manuscript of this volume. However, responsibility for the published version rests with the author and publisher.

© 1983 Joint Council on Economic Education/1212 Avenue of the Americas/New York, NY 10036
All rights reserved.

5 4 3 2 1

Lawrence A. Mayer: Director of Publications
Ester Moskowitz: Associate Director of Publications

Contents

Foreword iv

Preface v

INTRODUCTION
LAURENCE E. LEAMER AND PAUL A. SMITH

1. An Economics Framework for Analysis of Policy Issues 1
2. A Political Science Framework for Analysis of Policy Issues 4
3. Integrating Economics and Political Science 6

TOPIC OVERVIEW: PERSPECTIVES ON ECONOMIC DEVELOPMENT
ROBERT J. HIGHSMITH AND LYMAN H. HEINE

Introduction 9
Which Are the Developing Countries? 11
A Framework for Economic Development 12
Some Key Issues in Economic Development 14
Systems for Economic Development 19
Foreign Aid: Experiences and Lessons 22
Sources of Foreign Aid to Developing Nations 23
Conclusion 24
Bibliography 25

INSTRUCTIONAL ACTIVITIES
PHYLLIS BAILEY

Rationale and Objectives 27
1. Distinguishing between Developed and Developing Countries: An Introduction 28
2. Using Statistical Indicators to Measure Economic Development 30
3. Stages of Economic Development 33
4. Economic Development from a Personal Perspective 35
5. Agriculture and the Food Supply 37
6. The Population Issue 39

CLASSROOM MATERIALS FOR DUPLICATION 41

Foreword

The Economics-Political Science (EPS) publication series is part of a project the Joint Council on Economic Education began in 1973. The undertaking resulted from a recognition that teachers needed information on how to deal with complex social issues in their classrooms. The J.M. Foundation, which has a strong, long-term commitment to improve the quality of education in citizenship, provided the JCEE with the initial grant to launch the EPS project.

The first step was to hold a national workshop at which key educators were shown how to teach more effectively about these issues. Five regional workshops followed. Funds for these phases were provided by the J.M. Foundation, the Exxon Company, U.S.A., and the Lilly Endowment, Inc.

The next step was to develop teaching materials. Continuing grants from the J.M. Foundation and the Exxon Company, U.S.A., enabled the JCEE to begin preparing resource guides on a number of questions that had important economic as well as political aspects.

This is the fifth publication in the EPS series. We believe the series to be especially valuable because of its interdisciplinary focus and because it uses teaching strategies that have significant, measurable outcomes. The project is also noteworthy because it has brought together people of diverse backgrounds: specialists in academic disciplines and in education as well as high school teachers from systems of various sizes and kinds.

We acknowledge with gratitude the support of the funders for their help in making this project possible. We also thank all those responsible for the development of this series, in particular, June V. Gilliard, Director of Curriculum of the Joint Council and the project's director as well as her predecessor, George A. Fersh. Valuable advice and assistance were provided by Anthony F. Suglia and S. Stowell Symmes of the JCEE staff and George G. Dawson, a former JCEE staff member who is now director of the Center for Economic Education at Empire State College (State University of New York).

Michael A. MacDowell
President, JCEE

Preface

Organization and Uses of Unit Resource Material

Policy decisions affect everyone. Consequently, it is important that students acquire the knowledge and skills necessary for understanding the major policy questions facing our society and for participating effectively in the process of public debate and public decision-making.

Analyzing Economic Development Policies of Developing Countries is the fifth in a series of resource guides focusing on economic-political analysis of contemporary public policies and issues. In developing these Economics-Political Science (EPS) guides we have spared no effort to make the contents as widely useful as possible. The guides are designed to be used by high school teachers with instructional responsibilities for economics, government, United States history, problems of democracy, or other social studies courses dealing with contemporary social issues.

The resource guide on economic development policies of developing countries consists of several components, each designed to serve specific curricular or instructional purposes. The Introduction provides a general explanation of the conceptual framework used throughout the series for analysis of policy issues. It also provides a model teachers may use for extending the study of economic development policy or for creating additional units dealing with economic-political analysis of other matters of public debate and concern.

The Topic Overview has two purposes. First, it provides the teacher with background information on economic and political issues that confront developing countries as they attempt to formulate policy for economic development. Second, it serves as a concrete example of how the conceptual framework described in the Introduction is applied to the economic-political analysis of policy issues.

The instructional activities deal specifically with pedagogical questions pertaining to the why, what, and how of teaching about economic development policies of developing countries.

About two weeks of study are needed to complete all the suggested instructional activities in the sequence presented. It is anticipated, however, that some teachers will wish to use the material in other ways. Therefore, the activities are designed so they may be used singly or in various combinations, depending on the amount of time the teacher wishes to devote to the topic and the needs of the particular student group being taught. To assist teachers in determining which activity or combination of activities is most appropriate for their students, each instructional activity has been keyed to the objectives it is designed to achieve.

We wish to express our appreciation to the writing team that prepared the material for this, the fifth unit in the EPS series. Special thanks are due Lawrence A. Mayer and Ester Moskowitz, who edited it for publication.

June V. Gilliard
Director of Curriculum, JCEE
EPS Project Director

INTRODUCTION

LAURENCE E. LEAMER AND PAUL A. SMITH

A central purpose of this series is to help students in learning to view society and its problems from both economic and political perspectives. This can best be done through study of specific questions, each of which entails an economic and political analysis of a distinct social problem.

Economics and political science are complex intellectual "disciplines," each having an extensive body of theory and methodology. As such, their applications in the diverse areas of policy decision-making may leave the teacher searching for certain "essentials"—certain core ideas—with which to explain matters to the student. Such essentials can be found in a modest number of basic concepts that mark each discipline. These are presented in separate statements below, followed by a brief discussion of how those concepts may be combined to provide an integrated approach to the teaching of economics and political science.

1. AN ECONOMICS FRAMEWORK FOR ANALYSIS OF POLICY ISSUES[1]

It is useful to think of the concepts that form the basis for economic understanding in terms of several broad "concept clusters." The diagram provided in Figure 1 (page 2) illustrates how these clusters and subclusters are combined to form a schematic framework for economics curricula and instruction.

Every economy, however it may be organized, faces the fundamental problem that economic resources (natural resources, human resources, capital goods) are limited relative to the practically unlimited wants of people in the economy. How people allocate these resources among many competing human wants varies greatly among different economic systems. One broad class of systems solves this complex problem largely by reliance on tradition (e.g., some less developed economies), another one by "command" (e.g., centralized economies such as China and the U.S.S.R.), and a third class by a decentralized market mechanism (e.g., the United States and most Western European nations). In reality, most economies are mixed in their use of the three approaches and in the economic institutions they have developed, and the approaches and institutions change with the passage of time. We focus primarily on the U.S. economic system, but it is important to recognize that other systems face the same central economic problem of *scarcity*, although they deal with it differently.

When examining any economic system it is helpful to look both at its parts (microeconomics) and the whole (macroeconomics). In microeconomics independent elements can be explored, such as what products are produced, how much a firm produces, how much income a family earns, or why corn prices are what they are. But some problems require an analysis from the perspective of the total (macro) economy. Then economists examine aggregates such as general price levels, gross national products, employment levels, and other phenomena.

In our largely private enterprise economy (leaving government aside for a moment) competitive market prices are the dominant mechanism used to allocate scarce resources. Perfect competition rarely exists in the real world, but the competitive market provides us with a model of how markets "should" work when no individual is a big enough part of the total market to have any personal influence on market price.

In striving to maximize profits, businesses try to produce at the lowest possible cost those goods and services that consumers are willing and able to buy. In some cases they also seek to influence consumer demands through advertising and other selling activities. They draw productive resources (such as labor,

---

Laurence E. Leamer, who is the author of several JCEE publications, was a professor of economics at the State University of New York at Binghamton previous to his retirement. Paul A. Smith is professor of political science and director of undergraduate programs at the same institution.

1. Adapted from the January 1977 unpublished report prepared by W. Lee Hansen, chairman, Framework Committe for the Joint Council on Economic Education Master Curriculum Project.

FIGURE 1
Framework for Analysis of Economic Policies and Issues

Systematic analysis of economic policies requires:

IDENTIFICATION OF ISSUES

- Issues Pertaining to Relative Role of the Market vs. Government Action
- Issues Pertaining to Overall Performance of the Economy
- Issues Pertaining to Distribution of Income

KNOWLEDGE & APPLICATION OF BASIC ECONOMIC CONCEPTS

The Economic Problem

which arises from scarcity and the need for choice, and necessitates the development of

Economic Systems

for resolving problems and issues dealing with what to produce, how to produce, how much to produce, and how to distribute the fruits of production:

Microeconomics: Resource Allocation, Income Distribution, etc. and Macroeconomics: Economic Stability and Growth, etc.

KNOWLEDGE OF ECONOMIC INSTITUTIONS

which provides the factual and behavioral background needed to apply economic concepts

EVALUATION OF ECONOMIC ACTIONS AND POLICIES

which necessitates distinguishing between

Questions of Fact or Prediction vs. Questions of Judgment or Values

by applying

Measurement Concepts

for assessing economic performance,

identifying

Goals/Values

to be used as criteria for evaluating policy alternatives,

and

weighing policy choices in terms of

Trade-offs among Goals

land, and machinery) into those enterprises where they will contribute most to meeting consumer demands. While doing so, businesses pay out incomes to workers, landowners, and other suppliers of productive services who are also trying to maximize their economic returns by getting the best possible value or price for what they have to offer. These incomes, in turn, make it possible for income receivers to bid for goods they want. Thus markets in which prices rise and fall in response to changing demands and supplies provide the mechanism that links consumers and businesses, each group seeking to make the best of its position and abilities, yet each dependent upon the other. In economics, this is described as a circular flow model of the economic system. Individuals and businesses who save part of their income and make these savings available for investment in new productive facilities or in human beings increase society's capacity to produce in future years. As a result another circular flow exists, connecting those having funds to invest and those seeking funds to be invested.

Individual freedom of choice is central to the way the largely decentralized, market-directed American economy defines its goals and allocates its limited resources. But those individual freedoms of the consumer, wage-earner, investor, and entrepreneur are limited by laws and social institutions protecting the individual and society. Thus, markets and prices, reflecting shifting demand and supply conditions, are the main regulators of the allocation of scarce resources in the production of the most desired goods and services; but government, unions, trade associations, and other institutions help to set and enforce the rules under which competition takes place, and sometimes participate actively in the process of production and distribution.

There are two general types of queries fundamental to understanding policy issues. One concerns questions of fact or prediction: *What is known* about economic behavior? Or, if we undertake some action, what will be the predicted effects? The other type concerns questions of judgment or values: *What ought to be done* to alter economic behavior? Should we undertake a particular policy or not, given that various people and groups may be differently affected? The failure to distinguish between questions of *what is* and *what ought to be* is the cause of endless confusion and can lead to inappropriate policy analysis.

As we sort through the vast array of questions and issues coming at us from newspapers, television, political campaigns, and our involvement in economic life, we find that most of them can be grouped into the following three broad categories:

One major set of issues concerns the relative role of private market forces and government actions. On these issues we are interested in knowing "what happens," or what is likely to happen, in response to a change in the demand for, supply of, and the resulting prices of individual goods and services; to changes in the supply and demand for labor and capital; to new developments in technology. Response to these questions calls for a description of how the total economic system or its parts behave under conditions of free competition and varying degrees of restriction. A related set of questions pertains to "what ought to be done." What ought to be done, say, when rising prices for any commodity (e.g., oil, lumber, sugar, or coffee) become a political issue? This involves thinking about whether to rely upon the operation of market forces or to rely upon public action via government policy such as price control, rationing, special taxes, and the like. Another way of phrasing the question is: When "should" direct government action be used to allocate resources differently from the way the price system would allocate them? For example, should local government act to allocate energy sources, such as oil or gas: Should government continue to subsidize shipbuilding, farming? Most of these questions concern economic efficiency. To consider appropriate public policy about such questions, one must first determine the consequences of choices, analyze them relative to desired results and values, and then make what one believes to be the most favorable policy decision. But other questions of government action relate closely to economic equity. For example, should government raise gasoline taxes or use a direct quota rationing system to allocate limited gasoline supplies? Only after a detailed examination of all the possible effects would one be in a position to reach a judgment.

Another important category of issues relates to the economy's performance. What "causes" inflation? What "causes" unemployment? What "should be done" about inflation or unemployment? What policies should be pursued when unemployment and inflation exist simultaneously? What "causes" economic growth? What are some of the benefits and costs of economic growth? What is the long-run relationship between economic growth, population, and employment? Between economic growth and the environment? What is the "appropriate" rate of growth? Should we attempt to speed up or slow down economic growth, or pursue a "no-growth" policy? What is the best way to carry out our policies?

A third major category of issues relates to the distribution of income produced by the operation of market forces and the redistribution of government action. Again, it is important to separate "is" from "should be" issues. What is the current distribution of income? What produces this distribution? To what extent does this distribution perpetuate itself? What is the effect of existing and of proposed government policies on income distribution? Should policies be adopted that are designed explicitly to change the distribution of income or economic well-being? Should the tax structure be made more or less progressive? Should schools continue to be financed largely by property taxes? Should policies designed to improve economic efficiency be adopted if they affect the distribution of income? Should government subsidize the housing of elderly and low-income renters? These issues, some immediately vis-

ible and others hidden just below the surface, appear to be critical to virtually all the questions posed earlier. They come up in any evaluation of how the market system works, in determining whether collective decisions alter individual economic decisions, and in assessing the extent to which inflation, unemployment, and growth affect the general well-being of the population. Who gains and who loses, and who should gain and who should lose are the questions that best summarize what is at stake here.

There are several reasons why unequivocal answers to these and similar questions are not readily available. Economic systems are complex, and an understanding of these systems requires a conceptual framework, factual and cultural information, the application of analysis, the making of judgments, and the determination of action to be taken. Moreover, our ability to know exactly how effectively the economy and its components function is limited by difficulties in obtaining accurate and timely measurements of economic activity. Finally, a variety of unanticipated events affects economic activity, and thereby makes it difficult to predict accurately the results of specific economic decisions. Unlike the physical sciences, carefully controlled experiments are difficult to undertake in economics.

Even if our understanding of the economy and economic decision-making were vastly improved, we still could not expect all disagreements on economic issues and questions to be eliminated. Certainly, some disagreements will be resolved as our understanding is increased. Many disagreements will persist, however, because of differences in judgments about the actual or predicted effect of specific decisions, and still others will remain because individual economists, as do most individuals, adhere to different sets of values.

The heart of economics is decision-making—choosing among alternatives. But economic decisions are not made in a vacuum. Rather, they are made in the light of a set of goals. These goals vary from one society to another, from one group to another within a society, and from one individual to another within a group. Among the goals most evident in the modern world and particularly in American society are freedom, economic efficiency, equity, security, stability (full employment and the absence of inflation), and economic progress.

Economic decision-making involves the *opportunity cost principle*. It refers to what must be given up, i.e., to opportunities forgone when scarce resources are used to produce particular goods and services. A decision to produce one good entails giving up the possibility of producing something else that uses the same resources. The cost of producing that "something else" is the opportunity cost of producing the good chosen. For an individual, the opportunity cost of something purchased is the price of whatever could have been bought instead. Opportunity costs for a society are the costs of the alternative uses to which it could have put its productive resources.

A person or a group choosing one good instead of another is making a *trade-off*—that is, giving up less of one thing for more of something else. Society has to make trade-offs too, e.g., between its need for more energy and its desire to preserve the environment. Essentially this involves comparing the various costs and benefits of each of the alternatives and determining how these costs and benefits will affect different groups within the economic system.

Goals or criteria provide a means of evaluating the performance of not only an economic system and parts of it, but also of existing programs and proposed new policies. However, many of the goals conflict, and difficult trade-offs have to be made. Examples are farm price supports, which promote security but reduce efficiency; minimum wage laws, which can be thought of as equitable but may increase teenage unemployment; and wage-price controls, which may restrain inflation, but also reduce efficiency and freedom. Economic analysis does not make explicit value judgments in these policy areas, but it does help people to understand the nature of the trade-offs so that they can form their own judgments in the light of their own values. Perhaps most important, it encourages use of a reasoned approach in dealing with controversial economic issues.

2. A Political Science Framework for Analysis of Policy Issues[2]

The political scientist uses certain major concepts to find meaning in the world of politics. These concepts direct attention to the significant qualities of any political system and provide measures of its effectiveness. As in other intellectual disciplines, there is considerable disagreement in political science about what things are important and how they should be studied. Nevertheless, while political scientists might argue about exact definitions and preferred approaches, the following concepts provide us with working tools for political analysis. Each of the problems we shall be addressing in this series is a problem of public policy, and thus its solution—or nonsolution—must involve political decision-making. These concepts will provide the means for understanding that process.

- The first concept is *authority*. By this we refer to the legitimacy that a political leader or procedure or policy has. A political action is authoritative to the extent that it is accepted as right and proper by the community it affects. Authority, therefore, is a relationship that arises not from the will of governors but from the beliefs of the governed. What gives a political decision authority is usually its connection with some basic *procedure* or

2. The statement of political science concepts was prepared by Professor Smith, with the consensus of the other political scientists involved in the project.

institution that the community views as a fundamental value. Often this is expressed by some historical event or document. For example, we say that the U.S. Constitution gives the President authority to command the armed forces and the Congress authority to declare war, while neither has authority to do both.

Of course there are many kinds of authority—in art, science, religion, and so forth—all involving standards of performance or truth. The distinctive aspect of political authority is in its relationship to social power. "The state," we often say, embodies the authority to make "final" decisions affecting social values or, more specifically, to use coercive force. Political authority is a tricky concept because it is often confused with power and because its exercise almost always means that some members of the community must do things they don't want to do. This complicates the quality of approval implied by authoritative acts. Authority wanes as this complication grows.

- Our second concept is *power*. Power is the capacity to get people to do things they would not otherwise do, with *political* power activating instrumentalities of collective sanction—customarily the state. Obviously, power has many sources. It can "come out of the mouth of a cannon" or it can rest on such forces as love, money, oratory, knowledge, or authority. Like authority, power expresses a relationship. It rests on shared values and unequal resources. Power is authoritative only when its exercise is accepted as legitimate by the community. When power goes beyond authority, deep conflicts occur in the community and governments must use more force and coercion to sustain themselves and carry out policies. We ordinarily think of democratic government as a model in which power and authority overlap and where explicit procedures of consent are used to determine authority. The distribution (who has how much) and exercise of power are thus key factors in the way problems of public policy are handled in the political system.

- Although we have used the term "public policy" as if it were a simple and commonly understood concept, in recent years political scientists have given considerable attention to its meaning and analysis. One reason for this is that it is often difficult to know when an action is or is not part of a "policy," and when nongovernmental institutions actually might be "making" policy. For our purposes, this third concept refers to *patterns of action* by government that are directed at recognized social problems. Thus we think of public policy not as one action but as a *series* of actions having political authority and aimed at some coherent set of social needs. Policy, therefore, is something that results from what government does and that reflects the power, values, and skills of the political community.

- In order to deal with the multiple group and individual actions that go into policymaking, political scientists often use the concept of *process*. This refers to the dynamic relationships—especially the relationships of influence—among those who take part in the various steps through which policy is suggested, formulated, authorized, changed, and so forth. Sometimes the "policymaking process" refers to what happens in the political system as a whole, and sometimes to actions leading to a particular policy or set of policies. In either case, process is always active in nature, and the term emphasizes that governing or policymaking cannot be described adequately by formal structures of authority or power.

- This brings us to our fifth concept, *institutions*—well-established and "structured" patterns of behavior through which power is exercised and governmental actions are taken. Congress, the Presidency, the Supreme Court, political parties, elections, regulatory agencies, and city councils are all political institutions. Each of these is composed of a distinct structure of rules, procedures, roles, expectations and rewards; and each serves certain functions. In America institutional development is well advanced and policymaking is largely channeled through certain types of political institutions designed to "produce" policy. Since institutions are by definition well-established, and elements of their structure are often defined by formal rules (laws), political institutions tend to embody large amounts of authority in their respective areas of jurisdiction. Indeed, we often refer to persons who hold positions or offices in government as "authorities." So strong is this institutionalization that political activities outside of them are often viewed with suspicion, if not outright opposition. For example, street or courtroom demonstrations are usually treated as highly controversial and "out of order" in the American community.

  Political institutions, therefore, tell us a lot about public policymaking. As embodiments of authority, they are preferred channels for political action and power. They are not only natural targets for those in the community who wish to influence policies, but also are guides to who has community power. For example, congressional committees are the focus of political activity by those community interests over which the committees have jurisdiction; hence, those same committees usually become biased in favor of those very interests. The same thing happens to regulatory agencies. It is easy to see, therefore, that most policy processes occur in and around institutions. Moreover, important relationships develop between political institutions and other types—economic institutions, for example. Business corporations, labor unions, and markets have close and complex ties to political institutions ranging from committees of Congress and federal regulatory agencies to small-town governments.

- Our sixth and last concept is political *participation*—activities that are part of political decision-making, the results of which are supported by the power and authority of the state. The first point to be made about participation is its diversity. Voting is probably the form of participation most Americans would think of before any other, since free elections are an institution in America. But for those of us interested in public

policymaking, other forms of participation are more useful—writing letters to members of Congress, direct lobbying, or contributing to political campaigns, for example. Bribing or assassinating or providing information to government officials are other examples. These remind us that some forms of participation are more legitimate, more costly, or more effective than others.

A second point about participation is apparent from the above description: some members of the community participate more than others. Although it is not easy to summarize the enormously complicated nature of this point, as a rule the more resources of wealth, skill, or status people have, the more and more effectively they participate. The fact that this generalization can be made for every known political system has obvious implications for the distribution of power, the nature of policymaking, and the outcomes associated with policies. Democracies pride themselves on expanding participation, and this is a public value in the United States. Even so, the general relationship between resources and participation remains. Moreover, participation is greater in some areas of policymaking than in others. For example, fewer Americans "decide" the level of defense expenditures each year than where bridges will be built over inland waterways. Participation must be measured and judged not only in terms of amount, but also in terms of quality and breadth. Some men and women might participate with great intensity (and effect) in a relatively narrow area of policy, while others might participate over a wider range and with less effectiveness in any one area. Thus political participation is many-faceted and complex.

Looking back on the six concepts we have singled out for special emphasis in the understanding and application of political science, we see that each one in itself has a good chance of becoming an arena of controversy in the policymaking process: Does a particular policy represent an "abuse or a maldistribution of power"? Did the policy process wrongly exclude deserving groups in the community? Does government intervention constitute a "misuse of authority" or the "abridgment of rights"? The reason for this is that these concepts not only involve *description* and *analysis* of politics, but the *evaluation* of politics as well. Each carries with it values and standards: How much power is good? What extent of authority is proper? Who should participate, and in what way? And beyond this is the question of political *effectiveness*, the capacity of the political system to act, to work, to get things done. Remember that Mussolini was originally complimented because "he got the trains to run on time" (which later turned out to be questionable). So the effectiveness of a governing arrangement or of a public policy also becomes (and hardly surprisingly) a criterion of value.

Finally, we are left with the question, "What is politics?" Political (or "public") authority, power, process, policy, institutions, and participation all involve conflicts of value. Politics is the working out of these conflicts so that policies can be made and governments can function. In democracies politics is marked by bargaining, compromise, and accommodation, and it is this meaning of politics that is most common in America. Where there is policy unanimity within a political community or where policies are imposed on a community, there is no place for politics. Politics, therefore, occurs where there is conflict over social policies and where those conflicts are resolved with a minimum of value loss to any particular interest. Some members of the community will win, others will lose. Some will get more than others. But the gains and losses will be limited by the process of politics. Politics is often looked upon as a necessary evil, with suspicion and skepticism. But as you consider the different problems of public policy, and the conflicts and controversies over solutions that divide the community, imagine what policymaking would be without politics. It would be policymaking of absolute unanimity or absolute coercion, or both. Neither of these is consistent with our basic ideals of individuality and the free and vigorous expression of ideas.

3. Integrating Economics and Political Science

While economics and political science are separate disciplines, it is important to keep in mind that they have much in common, and that in effective analyses of public policy they almost always must be used together. Indeed, "political economy" itself has a long and distinguished tradition as an intellectual discipline. The similarities and differences between economics and political science are summarized in Figure 2.

Both economics and political science are concerned with human values and with the decisions about those values that have social consequences. Both disciplines are social sciences, which means that both have similar standards of scientific logic, evidence collection, and construction of theory. In short, they share a common emphasis on verified explanations of patterns of social life. Both, therefore, are concerned with social problems. See Part II in Figure 2 for a summary of the four steps in a rational approach to the study of social problems.

But the two disciplines differ in their framework for analysis, institutions, fundamental concepts, and type of evidence or "data" they most commonly employ. Economists and political scientists have therefore developed different areas of expertise. Economists are experts on the vast array of stable and changing conditions that are related to the distribution and exchange of goods and services. They concentrate their attention on the institutions or arenas where these economic decisions take place. The most notable arenas are what economists call "markets," in which prices are determined by the decisions of buyers and sellers. Here the data are commonly in the form of units of economic value—*money*—which have the great advantage of precision and comparability.

FIGURE 2

THE SUBJECT MATTER OF POLITICAL ECONOMY:
A Framework for Analysis of Political-Economic Policies and Issues

ECONOMICS (Economic Science)	POLITICS (Political Science)
FOUNDATION	
THE ECONOMIC PROBLEM (Wants > Resources → Scarcity, i.e., our wants exceed available resources and therefore scarcity exists)	THE POLITICAL PROBLEM (Conflicts of interest)
THUS	
I. Political economy is the study of the **methods** by which society—	
employs its resources (human, capital, natural, time) productively for the fulfillment of human wants.	resolves conflicts of interest over the authoritative allocation of values; thus a study of power.
Toward these ends	
Economics is a study of how a society decides— a. **What** wants to produce (i.e., what wants to fulfill) and **how much** to produce b. **How** to produce most efficiently (i.e., how to allocate resources most productively to their alternative possible uses) c. **For whom** to produce (i.e., who is to get what and how much and how is this to be decided)	Politics is a study of how a society decides— a. **What** goal values are to be sought and given authority b. **How** societies are to be organized for the pursuit and use of power and authority (i.e., mechanisms for resolving conflicting values, achieving social goals) c. **For whom** the organization exists (i.e., who gets what; whose goals are served?)
II. Political economy is the study of **social problems** relating both to the functioning of the organization as a whole and to its particular institutions.	
Both economics and political science usually employ a problems approach involving four steps—	
a. **Definition of the Problem**—What desired goals are believed to be inadequately served by existing institutions? How does "what is" conflict with what many think "ought to be"?	
Economics is concerned with problems relating particularly to the goals of— 1. Efficiency and productivity 2. Growth 3. Stability (both full employment and general price stability) 4. Security 5. Equity in the distribution of income	Politics is concerned with problems relating particularly to the goals of— 1. Justice in the exercise of power 2. Equity in the distribution of power (income, deference, security, influence) 3. Freedom (both limits on the use of power and access to resources needed to realize individual potential. 4. Effectiveness
b. **Understanding of the problem**—What concepts, what analytical tools, what facts do economics and political science have to contribute to an understanding of the problem and its proposed solutions?	
What do we know about how productively resources are being employed for the fulfillment of human wants related to the problem and the consequences for other values?	What do we know about value conflicts (i.e., conflicts of interest) related to the problem, how they are being resolved, and the resulting allocation and use of power?
c. **Public policy alternatives**—What are their economic and political implications? How may citizens, as individuals and groups, influence policy decision-making?	
What will be the probable consequences, both in the short run and long run (the seen effects and the unseen), for the economic goals stated above?	Who is proposing what and why? How does private interest relate to public interest? What are the probable consequences for the political goals identified above?
Thus what policy alternatives will bring the greatest net realization of values?	
I.e., a more optimal allocation (use) of resources (so that their marginal value products in all alternative uses will be equal).	I.e., resolution of the problem with a minimum value loss to any participant and a maximum value gain to all.
Which policy alternative is most compatible with one's economic philosophy (i.e., one's view of the proper role of government in relation to the economy)?	
d. **Action**—How may one implement one's views?	
How does one act as consumer, producer, as a member of an interest group to bring about desired changes?	How may one as a citizen or leader participate in politics to be most effective in bringing about desired changes?

Political scientists, on the other hand, are experts on the distribution and use of social power and on the institutions through which that power is mobilized and made authoritative. Most notably, these are institutions of government, political parties, and elections. Since there are no measures of power or authority comparable to those of money and market value, political scientists use various forms of data to study politics, including votes, opinion surveys, laws, and judicial decisons. It is also true that just as economists recognize that actions of government affect economic conditions directly and indirectly, political scientists know that economic resources are sources of social power and that economic issues are a major element of politics.

Insofar as alternative social goals can be assigned economic values and markets exist in which those values can be expressed and measured, economic analysis can be used to judge the desirability of proposed policies. Cost-benefit analysis is one way of determining desirability: actions will be undertaken if the benefits exceed the costs, but will not be undertaken if the costs exceed the benefits.

When, however, human values cannot be measured as economic goods, or when markets are for some reason (such as monopolies) not effective in their pricing and distribution functions, then policy decisions tend to be moved from the economic to the political arena. The realm of politics can encompass conflicts among alternative human values and social goals of all sorts, with the resulting policies being enforced through the power and authority of government. For each of the social problems treated in this series, you will find it interesting to observe how economic and political factors together contribute to both the cause and possible solutions of the problems and how social scientists analyze in their distinctive ways what the problems are and how they might be solved.

While we recognize the importance of the other social sciences and the extent to which they enhance one's understanding of public problems and issues, our aim here is to combine only two of these disciplines: economics and political science. The teacher resource materials contained in this and other units in the series provide concrete illustrations of how economics and political science may be combined to enable students (1) to analyze and understand policy issues and (2) to participate effectively in the political process through which policy alternatives are examined, promoted, and acted upon.

TOPIC OVERVIEW

PERSPECTIVES ON ECONOMIC DEVELOPMENT

ROBERT J. HIGHSMITH AND LYMAN H. HEINE

INTRODUCTION

Economic development has proven difficult to achieve in most of the world's poorer nations despite several decades of effort by these nations and several decades of assistance from the richer countries and international organizations. Here are examples of the problems that many poorer countries continue to face.

- Roughly 70 percent of the world's people who live in the 120 or so of the less developed nations receive about 15 percent of the world's income.
- About half the population in such countries is too young or too old to work (compared to 30 percent in the richer countries). Of those of working age, as many as 50 percent are unemployed in some countries or work less than they are able to, i.e., are underemployed.
- An alarming large-scale rural-to-urban migration is occurring widely in the developing world. Mexico City, for example, is receiving new residents at a rate that, if continued, will result in a population of 32 million people by the year 2000 (1980 population, 14 million).

Also, many of the criteria with which we measure the success of development—e.g. income, nutrition, and employment—appear to show little about which to be enthusiastic.

However, in recent years the view that economic development is failing has been challenged. Here is some evidence for this challenge:

- Income per person increased at an average of 3.1 percent per year in developing nations from 1970 to 1980 compared to 2.5 percent in the developed world.
- It took 100 years for developed nations to increase the life expectancy of their inhabitants from 40 to 50 years of age; developing nations achieved the same gain in only 25 years.
- Literacy rates have risen rapidly. One-half of the adults in developing nations today can read and write compared with only one-third in 1950.

Is economic development succeeding or failing? Conclusive agreement is hard to reach, for the answer obviously depends on the information looked at (or deemed most important) as well as on the preconceptions of the beholder. In fact, in some countries, simply preventing the economy from regressing may represent a gain of sorts. Whatever the case, there is an almost worldwide impulse to development among nations whose standards of living are well below those existing in Europe and in the United States, Japan, Canada, Australia, and the like.

The purpose of this volume is to provide a framework with which to understand and measure economic development, to assess its progress, and to help comprehend the impulse to development.

What Is Economic Development?

The term "economic development" is used in at least two senses. One is in the comparatively simple sense of measured economic growth. If a less developed economy experiences sustained growth, that is, it produces *more* goods and services per person (per capita) in practically every successive year, economic development is deemed to be taking place.

The second sense is in terms of the development process itself. Development is deemed to be taking place if the structure of the economy is changing in such a way as to ensure the *conditions* that bring about greater output per capita. Following are typical structural changes:

1. Modernization of agriculture takes place;
2. As agricultural activity becomes more productive, labor and capital tend to shift from farming to the simpler industries and services—typically in urban centers; and
3. Economic activity shifts from simpler industries and services to more complex ones.

In the real world, of course, more than one of these types of change may be taking place in a country at the same time.

It is, however, quite difficult and complex to measure economic growth by assessing structural change. To do so requires examining the structural evolution of one country—or group of countries—at a time. That would be formidable a task to undertake in a relatively short exposition such as the present one. Therefore, much of the discussion here will be in terms of measures of growth rather than in terms of changing economic structures.

Quite often the existence of growth implies that structural change is in process. Certainly growth usually implies that capital formation—new or added investment in productive facilities—is taking place. Such investment may range from the construction of simple irrigation ditches in farmlands to the building of a fairly sophisticated factory. But whatever its nature, capital formation that is properly adapted to local circumstances should help to increase production.

Another important source of growth is an increase in the educational level of the population. Economists call an increase in the educational level an increase in "human capital." Education is a form of capital because, like physical capital such as, e.g., a factory or a bridge, its contribution to production is long-lasting. Human capital can range from (1) the possession of simple physical skills to (2) being able to read well enough to grasp simple written instructions to (3) being able to perform complex tasks with tools or machinery to (4) being a trained professional such as a teacher, engineer, doctor, etc.

Whatever the originating reason, it appears that economic development occurs when people learn how to produce more goods and services per capita, when they act on that knowledge, and have the necessary means (irrigation, transport, machinery, etc.). This implies that economic development cannot take place when there is a failure to learn how to achieve it, failure to act on that knowledge, lack of physical means, or all three. The increase in the availability of goods and services (e.g., food, clothing, housing, health care, education, transportation, etc.) raises a nation's level of living and quality of life. Thus, the real goal of economic development is to improve the economic and social lot of all citizens. It is worth cautioning that one-time improvements in the economy, due for example to the purchase of foreign technology, do not generate the continually increasing amounts of new and improved goods and services on which economic development depends. The people of a nation must themselves learn to produce more and increasingly varied or improved goods and services on a steady basis.

Measures of Comparative Development

The measure most often used to compare rates of economic growth or levels of economic development among nations is real per capita gross national product—GNP. GNP is the market value of all the final goods and services produced by a nation in a year.[1] "Real" GNP, of course, means that the measure has been corrected for changes in prices. This prevents GNP, which is necessarily expressed in monetary units—usually in dollars for the purposes of international comparison—from being distorted by changes in prices within or among nations when their production is compared over a period of years. (If comparisons among countries are made for but one year, the price correction is not necessary). Real *per capita* GNP is obtained by dividing real GNP by the number of people in a country. It provides a measure of the amount of the final goods and services produced for each individual in a country during a given year.[2]

Examination of the per capita GNPs of the poorest nations (some as low as $100–$300 per person per year, indicating an income of about $2 to $6 per week) gives rise to the question, "How can people live on so little?" There are several reasons. First, the amount of income is understated because so much food, clothing, and housing in underdeveloped countries is not purchased. Rather, it is produced at home, and the poorer

1. Gross domestic product (GDP) is frequently used instead. GDP is a measure of the market value of final goods and services produced within a country. GNP takes account of international flows of income.
2. Measuring production of *final* goods and services prevents double-counting of production. For example, the value of all bicycles produced is included in such a way that the value of the frames, brake assemblies, tires, paint, etc., that go into the bicycles are not separately included in addition to the value of the bicycles themselves. If the constituents were also included separately, that would mean that bicycles were being counted twice.

the country, the greater is production at home likely to be. Such production does not get exchanged in a market where the transaction would be recorded for inclusion in the GNP.[3] Second, many staples that are sold in a market in a developing nation cost far less than the same products cost in developed countries. Third, because it is an average for a whole society, a real per capita GNP of, say $200, in practice means that some people get a good deal more while others get considerably less. Those who get the lowest incomes *are* desperately poor, and may well be starving in various degrees. Consequently, nations with low per capita GNPs tend to have a large proportion of extremely poor people even after account is taken of the inadequacies of per capita GNP as a measure of development.

There are other indicators that enable one to compare where a people stands on the ladder of economic development. They include measures of life expectancy, health, education, the degree of society's advancement in industry or in agriculture, the state of education, etc. The Physical Quality of Life Index (PQLI) is an interesting measure that combines several of these indicators into one number. The index has been published by the Overseas Development Council (Washington, D.C.). The PQLI combines three indicators—infant mortality, life expectancy at age one, and literacy—which reflect conditions not subject to purely economic or monetary measurement. Moreover, these indicators reflect the results of development. Thus, the PQLI may be more revealing of how the world's poorest countries meet the most basic needs of their people than per capita GNP might be. It turns out that there is a great deal of consistency, but not complete consistency, between ranking countries by per capita GNP and by the PQLI.

WHICH ARE THE DEVELOPING COUNTRIES?

In the broadest sense, the correct answer to the question posed in the heading for this section is: "All countries." The reason is that practically all countries try to achieve economic growth, and economic growth implies a process of change and development. However, in some countries growth is, practically speaking, nonexistent—e.g., Bangladesh, Ethiopia, Haiti. At the other extreme are some countries whose economies are so productive they may be said to have already achieved "development": the United States, Canada, Japan, Australia, New Zealand, and most countries in Western Europe. The Eastern European countries in the Communist bloc in general have lower GNPs per capita than the countries just mentioned, but compared to the rest of the world, they too are considered developed. Leaving aside the special cases of the very rich Middle Eastern oil exporters (Libya, Saudia Arabia, Kuwait, and the United Arab Emirates) most of the rest of the world can be characterized as consisting of "developing countries."

In fact, the term "developing countries" has come into general use as a designation for all the nations that do not fall into the category of "developed countries" because the former have objected to being labeled as "poor" or "underdeveloped" or "less developed" in the reports of various international organizations and in other discussions. This terminological point is discussed in somewhat more detail in the accompanying box titled "The Semantics of Development."

The most detailed of the three sets of classifications listed at the bottom of the box is that of the World Bank—its list contains five classes of countries. The categories are all more or less self-explanatory, except, perhaps, the last. That group, the Nonmarket Industrial Economies, consists of the communist-bloc countries of Eastern Europe: Poland, Bulgaria, Hungary, the USSR, Czechoslovakia, and the German Democratic Republic.

Here, as of 1980, is the range of GNP per capita for each of the five World Bank classifications:

Low-income economies	$410 or less ($80 for Bhutan, the lowest)
Middle-income economies	$420 to $4,500
High-income oil exporters	$8,640 to $26,850
Industrial market economies	$4,880 to $16,440
Nonmarket industrial economies	$3,900 to $7,180

The preceding classification is used in the World Development Indicators section of the World Bank's annual *World Development Report*, which in 1982 included data for only 125 countries. The World Bank's *Atlas* (see NOTE to the box) has data for about 175 countries.

3. Transactions of this kind should not be regarded as taking place in an "underground economy" of the type that exists in the United States. Home production does not occur in order to "avoid the market," but takes place outside of the market with no exchange of money. An example of analogous work outside of the markets of poor as well as developed countries is the unpaid service of one member of a family who cooks for the remaining members without receiving compensation. Such nonmarket production is performed in all countries and is not recorded in the GNP of any of them.

BEST COPY AVAILABLE

THE SEMANTICS OF "DEVELOPMENT"

A number of terms have been used, more or less indiscriminately, to designate the poorer or less industrialized countries as a group: "underdeveloped countries," "have-not countries," "less developed countries" or LDCs, "developing countries," the "Third World" (the industrialized countries are the First World and the communist nations are the Second World), and sometimes—perhaps impolitely—"backward countries." A distinction has also been made in the classification of countries in the Third World, so that this term designates poorer countries that have been making economic progress, and the "Fourth World," designates those whose progress has been nil or extremely slow. Another distinction that has gained currency is between the less developed countries that possess oil, i.e., the Organization of Petroleum Exporting Countries (OPEC), and the rest of the Third World. And the poorer LDCs, whose progress has been made even more difficult than before by the immense rise in oil prices beginning in November 1973, have in some instances been called the "Most Seriously Affected" nations (MSAs), which amounts to a more formal designation for the "Fourth World."

In addition, there is the "Group of 77." It consists of a caucus of Third World (developing) countries in the United Nations who are active in the United Nations Conference on Trade and Development (UNCTAD). UNCTAD is an organization in which developing and developed countries discuss matters related to trade, aid, and the transfer of modern technology to LDCs. The so-called Group of 77 now includes 124 countries. The Group of 77 also has an offshoot that is quite actively involved in monetary matters with the International Monetary Fund. It is called the "Group of 24," and is made up of representatives of eight countries each from Asia, Africa, and the Western Hemisphere.

Key international agencies have adopted somewhat differing formal classifications. The main headings used by three of the chief agencies are:

United Nations	International Monetary Fund	World Bank*
Developed market economies	Industrial countries	Low-income economies
Developing market economies	Developing countries	Middle-income economies
Centrally planned economies	Non-oil developing countries	High-income oil exporters
	Oil exporting countries	Industrial market economies
		Nonmarket industrial economies

NOTE: Probably the most convenient and comprehensive data on the gross national product of the world's countries and other measures of their state of development are contained in the *World Bank Atlas*, which includes data for about 175 countries. The latest issue may be obtained at libraries or by writing to World Bank Publications, Washington, D.C. 20433. As of 1982, the price was $2.50.

*Centrally planned economies, with the exception of Hungary, Romania, Yugoslavia, Vietnam, Laos, the People's Republic of China, and Cambodia, are not members of the International Monetary Fund or the World Bank. Nevertheless, the World Bank publishes statistics about many centrally planned economies.

A FRAMEWORK FOR ECONOMIC DEVELOPMENT

Economists have increasingly come to recognize that the provision of economic incentives to individuals is crucial to overcoming the problems of economic development that confront low-income countries. In the end, development depends on the actions and responses of individuals, not on a directing organization or a government, no matter how well organized. If individuals conclude that they will be able to collect sufficient *benefits* from their economic activities to cover the *costs* to themselves—be those costs effort, time, or use of their personal property—they will put forth more effort in these activities. If the benefits fall below

the costs, individuals will withdraw from those activities. Thus, economic development depends in large part upon the availability of opportunities for individuals to make net economic gains by decreasing the costs of economic activities, by increasing the benefits, or by a combination of both.

Effects of Incentives

Agriculture provides a good illustration of the usefulness of incentives in order to promote economic development. All farmers are engaged in a continuing search for ways in which to ease their burdens. They are constantly making an extraordinary number of changes in the ways they grow crops. Most of the changes are minor, yet each change, though perhaps imperceptible, contributes to increased output for each hour of work the farmer puts in. These improvements, no matter how small, are permanent, and they yield continuous increases in crops or livestock, which in turn allows the farmers to buy more goods and services.

Farmers may be helped to initiate changes by receiving more schooling; being able to obtain special advice about farming from government, private, or foreign sources; sharing experiences with neighbors and friends who grow similar products, etc. General dissemination of information about price or other developments also contributes to change. However, if somehow farmers are discouraged from trying to decrease their burdens or prohibited from collecting the benefits that make farming worthwhile, they will make less of an effort. If they stop trying, output per farmer stops rising and economic development through agriculture ceases. In nations where most people are farmers, discouragement of farmers can lead to economic stagnation or worse rather than lead to development. Some ways in which farmers can be discouraged are by having exorbitant taxes placed on their sales or income, as well as by overly high rentals demanded by landlords, inappropriate regulations imposed by governments, lack of the help or advice needed to introduce innovations.

Effects of Political Forces

Economists also have come to recognize the enormous potential for good or ill that political forces play in shaping a country's economic development. In every society, political leaders, government officials, and sometimes military officers control the power by which the state exercises its will—be it a democratically determined or an authoritarian will—over its citizens. In the last resort that will can be exercised through the legal use of force. Political processes, institutions, and public policies—in short, political power—can be organized so as to encourage or compel the individuals on whom economic development depends to behave in ways that yield positive results. Exercising political power in this manner constitutes a precondition for the flourishing of economic development.

A state, of course, has other interests or goals that bear on the economy apart from economic development. Reaching these other goals, e.g., promoting a particular industry for reasons of national prestige, curbing imports to save foreign exchange, discouraging foreign investment in its economy for nationalistic reasons, achieving military power, may well restrict a country's own economic development. The direct effects or side effects of such policies may well discourage producers from behaving in ways that will advance development and as a result may curb or thwart economic development. Thus, societies face trade-offs among policies designed to achieve several different goals. The challenge facing government policymakers who are interested in encouraging development is to find a mix of policies that make it possible to reach other goals of the society without at the same time discouraging economic development.

The role of political leaders is especially important in economic development. In every society, political leaders make decisions that shape the direction, scope, and pace of development in their countries. In the late twentieth century, decisions of developing-countries are often made in a domestic and international context that requires leaders to give priority to short-term objectives (e.g., the retention of political power) which may be incompatible with economic development. Development will also be affected by the extent to which citizens view political leaders as legitimate, by the degrees of the leaders' popularity, the degree of political stability, and the extent to which citizens participate in or are consulted about decisions. Moreover, the values, attitudes, and ideology of political leaders can significantly influence development. Will they seek to develop or industrialize fairly gradually, so that the country's economic and social structure will change without undue disruption? Will they, instead, seek to develop extremely rapidly, and thus risk the potential damage of a swift realignment of a country's social and economic structure? Will they seek to isolate the country from technological change and modern institutions and thus opt for present social and economic stability at the possible risk of future economic or political difficulties? Different countries and different leaderships can generate vastly different development strategies and incentives. And then there is the question of how well trained or capable any particular political leadership is for carrying out a coherent and effective strategy for economic development.

Countries that try to ascend the path of development face many difficulties. Three of the more urgent ones that usually face such societies at the outset are: how to hold population growth in check; how to improve the health of the people; how to increase the production of food.

Alarming statistics about the growth of world population, a growth that is now concentrated especially in developing nations, are easy to come by. By the early 1980s global population had nearly doubled to 4.5 billion people in less than fifty years. The World Bank has estimated that population will increase to 8 billion by the year 2020, and ultimately will settle at 11 billion. Every twenty-four hours, 200,000 people, about equal to the population of Des Moines, Iowa, are born. Partly because death rates are declining faster than birth rates, every twelve months births exceed deaths by so wide a margin that there are 73 million more people on earth than the year before. The problem of coping with a rising population is made more difficult because each year many more women in the developing nations are entering the reproductive ages than are leaving them.

Most of the growth in the world's population is occurring in developing nations while population in the rest of the world is increasing quite slowly. As a result, by the year 2000, the ratio of people living in the developing countries compared to those living in the developed ones will rise from the recent 3–1 to 5–1. To stop these increases, that is, to keep population at its present—i.e., its replacement—level, two-thirds of all couples in the world would need to practice family planning. Only one-quarter to one-third do so now.

The consequences that confront developing nations because of rapid population increase appear to be severe. The United Nations Education, Social, and Cultural Organization (UNESCO) estimates that owing to a lack of sufficient educational facilities in developing nations and other causes, the number of illiterates in developing nations will swell from about 800 million today to 1 billion in the year 2000. Women in the developing nations, who lost ground in the battle for literacy between 1958 and 1980—their rate of literacy dropped from 60 percent to 55 percent—seem to be facing particularly bleak prospects in education.

The unemployment problem will probably also grow worse. If the projections of the U.N.'s International Labor Organization are correct, approximately 700 million people will be unemployed or underemployed in developing nations in the year 2000—about half of the projected labor force. That compares with about 280 million in 1975—about 40 percent of the labor force in that year.

Another gloomy note comes from the Worldwatch Institute of Washington, D.C., which estimates that the increase of population residing in rural areas has produced close to 1 billion people who are landless. Because such individuals do not have the traditional rural attachment to the soil, their incentive to move to areas with better economic opportunities is great. As a result, Worldwatch believes that three-quarters of Latin America's people will live in cities by the year 2000. Their need for jobs, housing, and social services in the cities will go far beyond the amount that can possibly be provided them between now and then. Advanced nations, whose population increased as their economic development got under way in the eighteenth century, were able to export their excess people to new lands. Developing nations today lack such outlets.

We have just presented one side of the population picture. This side underscores the urgency of Robert McNamara's warning in 1980 toward the end of his term as president of the World Bank: ". . . short of nuclear war itself, population growth is the gravest issue that the world faces over the decades immediately ahead."

But there is another side. Despite the dire population predictions for the developing world, there are some brighter signs. The inevitability of population increase may not be so serious a problem as often claimed. For example, the *rate* of population growth in developing countries has been slowing down within the past twenty years or so. In fact, birth rates have been declining in many such nations, although rates in most countries are still comparatively high.

More specific evidence comes from the World Fertility Survey conducted in 1978 among 400,000 women. Forty developing countries were included, and the findings were encouraging. Nations as diverse as China, Indonesia, Thailand, Colombia, and Mexico showed *declining* fertility rates (i.e., number of children borne by women in the reproductive ages). Only three developing nations—Pakistan, Bangladesh, and Nepal—failed to show steeply declining fertility rates. The downtrend was evident among women in all economic classes—among the poorly educated and even among rural women who traditionally have sought larger families because even young children can be put to work on farms.

The survey also collected considerable evidence that women are postponing marriage and thereby limiting their fertility. Later marriage usually means that a couple will have fewer children. In Malaysia in 1947, 48 percent of all females were married between the ages of 15–19; the 1978 survey found that only 11 percent

in that age group were married. In South Korea, the average age of marriage today is 21.6; one generation ago it was 18.6 years. A finding in Costa Rica showed that previously women ages 45–47 had borne an average of 7.2 children who survived; more recently, women of the same ages in Costa Rica have borne an average of 3.8 offspring. The same trend was found in Sri Lanka. Older women had produced an average of 6.0 children, but later generations gave birth to 3.4 children. All these findings suggest that progress in slowing population growth is being made in most developing nations.

What is behind the favorable findings of this report? One factor is that in recent years governments have established public policies aimed at slowing population growth and, importantly, have committed resources to the purpose. Among the most effective of such policies are those that provide incentives for people to have fewer children and permit or encourage the dissemination of family planning information and techniques. There are, of course, a few instances of public policies that go beyond the tolerance of the people of developing nations. For example, in India, Prime Minister Indira Ghandi's late son, Sanjay, tried to enforce the government's population control policies by using the power of the state against citizens who resisted. In part because of these efforts, Mrs. Gandhi's first government was turned out of office. The more general case is, however, that population policies based on humane principles and using proper economic incentives prove to be useful tools with which governments can deal with the problem of increasing population.

Other forces have also been helpful in reducing population growth. When individuals become more prosperous as economic development proceeds, they discover that additional children involve costs and lost opportunities that exceed what some parents are willing to bear. For example, as mentioned above, children become economic assets at an early age to parents who live on a farm. Children of parents living in nonrural areas, however, do not become assets until much later. And, as we have also seen, many families are moving from farms to cities in the developing world. Accordingly, faced with higher costs and lower benefits, people make decisions to have fewer children.

More children in developing nations survive today thanks to better medical care. Thus, it is no longer necessary for families to bear the costs of large families in order to ensure that enough children survive to care for the parents in their old age. Professor Theodore W. Schultz of the University of Chicago, who won a Nobel prize in economics in 1979, describes the changed reproductive behavior in developing nations this way: "People don't produce like lemmings headed toward their own destruction."

Clearly there is some reasoning and decision-making involved in the bearing of children. As conditions change, parental decisions also change. Today's changing economic and political conditions are bringing developing nations relief from the very population pressures that might be the greatest threat to economic development.

All this being said, there is an opposing view—although probably a minority opinion—that there are benefits from population growth that have by and large been overlooked. The most prominent proponent has been Professor Julian L. Simon of the University of Illinois. In several books and articles he has put forward the argument that the larger a population, the more people are available to create and apply new knowledge—and knowledge is an important source of economic growth.

Simon also argues that a larger population also ensures a growing market. That, in turn, provides incentives to build factories capable of larger output—which are likely to be more efficient factories than smaller ones—and to allow those factories long production runs that tend to reduce costs per unit of output. Simon also sees favorable effects if a larger population increases population density in any given land area. Such concentration makes it profitable to build, for example, more and larger transportation systems, irrigation systems, and ports.

Simon has put forward these and other points both in the more popular and in the scientific press. For the nonprofessional reader, Simon's most thorough and accessible statement of his views appears in *The Ultimate Resource* (Princeton University Press, 1981). The ultimate resource Simon refers to, of course, is people.

Health

Few things have a greater influence on the quality of life experienced by individuals than the state of their health. Yet, in developing nations, most indicators of health are well below those in developed nations. For example, 65 percent of the people in the developing world lack suitable sanitation and safe water. It is no wonder that contaminated water is deemed the greatest cause of poor health in developing nations.

A second indicator of health, life expectancy, is also low in developing nations. Whereas the average life expectancy in developed nations is 72 years, the average is 57 years in developing nations. In Southeast Asia it is 51 years, in Africa it is 49 years, and there is much variation around these averages. Infant and child mortality are significant factors in the determination of life expectancy. Fewer than 20 infants out of 1,000 die in the first year after birth in developed nations, but 100 to 200 out of 1,000 die in developing

nations, and the number can be 500 per 1,000 in the poorest countries. From ages 1 to 5, the death rate is 1 per 1,000 in developed countries. In developing countries it varies from an average of 6 per 1,000 in Latin America to 10 per 1,000 in Asia and to 30 per 1,000 in Africa.

A third indicator of health shows that, on average, 10 percent of the lifetime of a person living in a developing nation is disrupted by serious illness compared with a much smaller percentage in developed nations, where people live longer. Frequently, as already mentioned, the illness is caused by contaminated water.

The drawback of poor health to economic development is clear. It cuts into work time, and time lost from work is lost income and time lost from producing goods and services for others to enjoy. National resources that would otherwise be available for investment in more productive equipment and better technology must be diverted to the battle against illness. Poor health discourages people from acquiring additional training with which to increase their future earnings, savings, and productivity. Endemic diseases sap energy that people would otherwise have available to enjoy their leisure time. Finally, shorter life spans that stem from poor health result in fewer years of participation in the labor force by workers who, in developed countries, would be in the peak years of their productivity. Hence, the maximum possible yield from education or special training is lost.

The effect of the costs of poor health to developing nations is less economic development. Decision-makers in the political arenas of the developing world face the enormous challenge of improving health in order to speed economic development in their countries.

Dramatic changes are occurring in the way political leaders in the developing world think about the most effective ways to deliver health services. In the past, political systems in some developing nations created health agencies that imitated the type of service provided by health agencies in developed nations. This kind of health care, however, is often inappropriate for developing countries. Since three-fourths of all people in developing nations live in villages and shantytowns, health care for them must be compatible with the conditions in which they live. Traditionally, physicians in developing nations have been trained in medical institutions located in the developed world. They often graduate with skills that address the needs of patients in developed countries, not the needs of their own compatriots. As a result of incentives arising from the conditions of their training, these physicians settle in developed nations in large numbers. The medical needs there are more compatible with their training, the remuneration from medical practice is greater, and the facilities are better.

The largest net exporters of physicians have to a great extent been those nations that can least afford to replace them. For example, the Phillipines have more than 10,000 of their physicians living abroad. And three-fourths of those who return home choose to live in urban areas rather than practice in the rural villages where the need is greatest but the remuneration and facilities are less gratifying.

Western-style health care focuses on curative medicine and allocates resources toward the development of sophisticated medical institutions in urban areas. Such care is appropriate for developed countries where little regard need be taken for the conditions to which the individual returns once healed. Much more attention to the patient's home environment must be paid in the developing nations.

Physicians trained in the West, moreover, typically do not study the communicable diseases endemic in developing nations. There, the leading causes of death from disease are malaria, schistosomiasis (snail fever), filariasis (a worm infection causing blindness and elephantiasis), trypanosomiasis (sleeping sickness), and leprosy. And each year more than 5 million children in developing countries die of diptheria, whooping cough, poliomyelitis, measles, and tuberculosis, all diseases that have been virtually eliminated in the developed world.

What is needed to deal with the typical conditions in developing countries is primary or basic health care—health care that endeavors to provide clean water, adequate nutrition, personnel acquainted with local needs, and drugs that fit the local causes of disease. Moreover, some hard thinking is needed. It must be recognized that there is no single universally applicable formula to provide primary health care. Health policy and care in each nation must be based on its own mix of climatic and environmental conditions and must have regard to its own economic, social, and political characteristics.

Progress that some countries have made in providing basic health care gives hope for an improved quality of life in developing countries. In the People's Republic of China, over half the "barefoot doctors"—men and women with only six months or less of training—provide basic health care in rural areas throughout the country. In Lusaka, Zambia, for example, the incidence of diarrhea fell by more than 40 percent thanks to a project that brought safer water supplies to the city's slums. A successful program to combat tuberculosis by standardizing diagnostic procedures, proving the effectiveness of chemotherapy administered in the home, and devising a suitable course of treatment was instituted in the Indian state of Madras. A new, simple needle to deliver the correct small dose of antismallpox vaccine has been developed. Treatment for diarrheal diseases that counteracts the de-

hydration of the patient by administering solutions of simple chemicals has been devised. (Mahler, p. 69).*

Agriculture

The scene varies little from country to country. Millions sit idly outside mud huts, crushed by crop failures due to drought or floods, wondering when they can eat again. Women are treated like cattle, slogging in the fields with babies on their backs. Children with bellies swollen from protein deficiency play in the dirt. For residents in the Sahel region below the Sahara, abuse of the land and cruelties of mother nature have created a severe famine that already has cost tens of thousands of lives.

This bleak portrait of agriculture in Africa painted in 1978 by a reporter for the magazine *U.S. News & World Report* (Bacon, p. 58) contrasts sharply with a reviewer's digest (Briggs, pp. 9, 42) of Julian Simon's perspective in *The Ultimate Resource*.

The global famine forecast is a [fallacy]. Worldwide, people are eating better than ever before because the amount of cropland is increasing, and the yields per acre are skyrocketing. Without any technological marvels—only the transfer of existing methods from highly to less productive areas—agriculture can feed tens of billions of people.

The hunger business has been superbly promoted. The U.N.'s food organization cooked up the slogan of half-the-world-going-to-bed-hungry-every-night. But, because the eagerly anticipated world famine has failed to materialize, the drought in the Sahel—the least populated corner of Africa, so thinly populated that there were few people to starve spectacularly—was made a proper disaster by the U.N. through the simple expedient of quadrupling the fatality estimates.

The truth about the status of agriculture in developing nations probably lies somewhere between the extreme positions represented by the article in *U.S. News* and Simon's perspectives. How is one to judge whether present agricultural methods are helping or hindering economic development? One must first understand the processes that lead to progress in agriculture. Then one can rationally compare what is being achieved with what can be achieved.

Many nonprofessionals who have thought about the matter argue that poor soil and overpopulation account for lack of progress in agriculture. However, Nobel-prizewinner Theodore Schultz disputes this claim. His research on the role of agriculture in economic development has shown that poor soils do not explain low levels of agricultural production per person working on the land. There are places on each continent with rich soils (e.g., southern India and the alluvial lands along and at the mouth of the Nile River) from which people eke out only a meager existence. There are places with poor soils—e.g., most of Europe and Japan—where levels of output are prodigious. The difference is explained, says Shultz, by the expenditures people make on the land in order to increase its productivity (expenditures on irrigation, fertilizer, pesticides, etc.).

Just as poor soils fail to explain low agricultural production, so too do excessive numbers of people per acre fail to explain it, according to Schultz. Indeed, there are no formulas for determining when a country has too many people per acre. On the contrary, evidence reveals that when one compares low-income countries that have the same population-land ratios, one discovers quite different degrees of poverty. Moreover, Schultz has found that in no country is there a fixed amount of suitable land on which a country must depend for its food supply.

If agricultural production is not determined by poor soils, by the number of people per acre, or by the number of acres being cultivated, what determines it? Again, according to Schultz, the explanation lies in the incentives available to farmers to augment the supply of land available, to apply more fertilizers, to improve irrigation, to employ new research findings, to use a higher order of technology, and the like. Changes like those just listed increase production per acre. And in the process they lessen people's dependence on traditional agricultural methods.

Even the most backward peasant has at least two incentives to improve the use of land: (1) the resulting lower costs per unit produced; (2) the increase in benefits in the forms of greater leisure, released time to produce other commodities, and the like. Thus, the amount or the condition of land per se is not the critical factor that produces farm poverty in developing nations. Unsophisticated people, lacking the skills or incentives to improve the productivity of the land, are the critical factors. According to many estimates, the agricultural sector of most developing nations can produce enough food and generate improved income and welfare for the poor—i.e., contribute to economic development—if the quality of human resources can be improved and farmers are not discouraged from using new knowledge (Schultz).

Political systems in many developing nations, most often unwittingly, use the power of the state against agriculture. Without intending to, governments discourage farmers from engaging in activities—principally in education and in farm-related investment—that help increase yields. As a result, food production fails to rise or even decreases. Governments frequently discourage these activities by controlling food prices—prices may even be set below farmers' costs of production. Such actions satisfy politically powerful urban groups and urban workers since they can buy

* For complete references, see the bibliography, which follows this overview.

more food with their incomes, at least in the short run. However, ceilings on the prices of agricultural products decrease the potential or actual benefits available to farmers. The situation is all the worse should farmers find themselves facing rising prices for the goods and services they purchase from the urban sector. Since, under one or both conditions, the benefits from engaging in agriculture are reduced—perhaps severely—farmers curtail production. In nations with increasing populations, the policies just described can be ruinous.[4]

It has been said that the Sahel region in sub-Saharan Africa includes soil that is among the richest on earth—soil comparable to that of California's San Joaquin Valley. In the long run, with dams and disease control, the Sahel region could not only feed itself but even produce food for export. Yet the area continues to experience abnormal shortages of food because the region seems unable to take effective steps leading to economic development. Political or military turmoil in places such as Afghanistan, Laos, Lebanon, Vietnam, Pakistan, and Bangladesh also has a negative impact on agricultural output.

Yet there are success stories, experimental evidence, and research results that show countries can establish policies and regulations that are economically and politically advantageous to agricultural output and economic development.

One success story illustrating the contribution agriculture can make to economic development has been unfolding in Central Java, Indonesia, over the last decade or so. At the beginning, failure was evident everywhere. Average food intake per person was only between 1,000 to 1,200 calories per day and protein consumption was about half the recommended minimum. As a result, infant mortality was high, and illnesses resulting from poor nutrition were commonplace, especially goiter (due to a deficiency of iodine); eye problems (due to a lack of Vitamin A); and anemia (resulting from the presence of hookworm and a lack of iron in the diet).

Today, improvement is strikingly evident in Central Java. The traditional types of village goats have been replaced with species that produce nearly four times more milk. There are fish tanks in which locally produced varieties of fish for consumption are fattened. These fish are especially important during seasons when other foods cannot be grown locally. Families have also been taught to cultivate fresh vegetables. As a result of these advances the number of calories and the protein consumed per day have risen dramatically, even though the standard of living in other respects has remained quite low.

What has accounted for the success in Central Java? First, the government encouraged an inflow of foreign aid from wealthier countries in forms that helped to produce crops people wanted to grow. Consequently, farmers welcomed rather than resisted new ideas for increasing crop production. As a result, agricultural output—and thus economic development—increased. Second, no effort was made to persuade people to produce or use products, such as certain grains and powdered milk, that were alien to them and their culture. Third, the program focused on helping local people to help themselves rather than to become dependent on outsiders.

The prospect for success of the kind occurring in Indonesia on a worldwide scale may be substantial—for at least two reasons. In 1973—the latest period for which data are available—only 38 percent of the wheat-producing areas of Asia and North Africa were producing high-yielding varieties of wheat, and only 26 percent of the rice-producing areas were producing high-yielding varieties of rice. Should more areas switch over to high-yielding varieties, food output can increase a great deal. A second reason is that wealthy nations are engaged in research and development aimed at increasing yields from poor soils without the use of costly fertilizers and irrigation. Other experiments are under way that also add considerable promise for greater increases in food crops (Harrison).

Recognition by governments and others of the importance of agriculture in economic development is widespread. For example, in twenty-two developing nations, person-years devoted to agricultural research increased more than threefold from 1959 to 1974. One study of the effects of investment in agriculture in several states in India found that each dollar of investment in agriculture yielded a rate of return of 40 percent (Schultz, p. 37). A National Academy of Sciences (U.S.) study seeking to aid in increasing the world's food supply by compiling a list of all edible plants produced very encouraging results. Of the hundreds of thousands of plants on earth, only 100 currently are in widespread cultivation, and thirty of these account for 95 percent of all calories and protein consumed. In the NAS study, scientists categorized 400 plants as appropriate for large-scale cultivation, especially in tropical countries. Thirty-six of these plants are especially high in nutritional value and are economical to produce (Cousins, p. 9).

The means to increase the productivity of agriculture in the developing countries appear to exist. The question is how quickly and on how wide a scale they will be used.

4. Farmers in the poorest countries or in the poorest parts of a country may only grow enough to feed themselves or to exchange products with their neighbors. They will probably not be affected by poor government policies, but they are also likely to remain in a stagnant and impoverished condition.

There are many other issues facing developing countries beyond those we have already examined. The choice of under which economic and political system development is to take place is probably the most important, for reasons that will be taken up presently. As do other nations, developing countries have three principal options upon which to base their development policies: market-oriented approaches, government planning and control, or a mixture of the two.

A market-oriented approach to development, which is often referred to as capitalist, relies upon the private decisions of buyers and sellers in individual markets to answer three questions: what goods and services should a country produce in order to promote development; how should that production take place; and how should that production be distributed. For example, if private producers in a developing country are willing to put a lot of their resources and effort into growing sugar cane for sale in the world sugar market, and buyers in other countries will purchase it, then that developing country will produce a great deal of sugar cane. This helps answer the question of what should be produced, namely, a lot of sugar cane. The skill of the sugar workers and the capital and resources the owners are willing to supply helps determine how the sugar cane should be produced. Owners and workers engaged in raising sugar cane earn incomes which they can use to purchase other goods and services—including imports—available in a developing country. This helps answer the question of how to distribute the products a society needs or values. (This question is often called the "for whom" question.)

The process described for sugar cane applies to other goods and services produced in a country that relies upon the behavior of markets—at home and abroad—to guide and foster development. In this manner, the what, how, and for-whom questions are answered for the entire society by the behavior of the various markets through which the economy of a developing nation operates. Hong Kong and Taiwan are successful examples of the market-oriented approach to economic development.

Development through centralized government planning, typically the socialist form, does not rely upon the individual decisions of buyers and sellers. It relies on a corps of planners, usually selected by government, to decide what, how, and for whom to produce in order for the nation to develop. Planners select the goods and services and the amounts that producers may produce. Moreover, by controlling investment, the planners determine a great deal of the technology with which each product is produced. As a result of their decisions on the first two matters, the planners determine the kinds and the total quantities of goods and services available to consumers—thus resolving the for whom question as well. Cuba and Romania are examples of countries that rely mostly upon government planning for their economic development.

In order to ascertain whether countries employing the different systems for development are better off due to using one system rather than another, many scholars divide the world into classifications such as advanced capitalist countries, communist (or Marxian-socialist) countries, and Third World countries (among which several types of economic systems occur). In 1979, Professor John G. Gurley of Stanford, who, as a Marxist, is especially interested in the subject, published such a comparison.

Gurley found that advanced capitalist nations contained about 20 percent of the world's people, and produced a GNP of $5,000 per capita on roughly one-quarter of the world's land. They produced about 65 percent of the gross world product. Gurley categorized twenty-four countries as Marxian-socialist and found that they contained nearly 35 percent of the world's people and produced a GNP per capita of approximately $1,000 per person on about one-third of the world's land. They produced about 20 percent of the gross world product. (The Soviet Union and China dominate this group, containing 85 percent of its people and producing 75 percent of its GNP.) Third World nations contained about 50 percent of the world's people and produced a GNP averaging $350 per capita on about half of the world's land. At the same time, the Third World produced only some 13 percent of the gross world product.

Findings from studies such as the above typically reveal that both high and low growth rates have been achieved by nations in each category (Weaver and Jameson, p. 214). Thus, it is difficult to conclude which type of system yields predictably higher or lower rates of economic growth. One important observation that can be made is that many Marxian-socialist economic systems have been having trouble in achieving high levels of agricultural output. The Soviet Union is a principal example of this significant shortcoming.

Findings such as the foregoing do not seem to deter either those who favor purely market-oriented or who favor purely centrally planned approaches to economic development. Both approaches, naturally, have many critics. Market approaches, say their advocates, successfully and almost continually increase GNP per capita. However, critics oriented toward planning claim that unemployment and poverty generally increase, under the market approach and that as a result the distribution of income becomes more unequal in de-

veloping countries that use a purely capitalist method in order to develop. Advocates of government planning argue that their approach successfully increases the equality with which income is distributed. Their critics dispute this claim, and also say that planning gets poor results, e.g., "by inhibiting the flow of resources to where they are needed; by imposing standardization across regions where diversity is more productive; by creating incentives for the most talented citizens to enter the political arena and to leave the economic arena" (Bauer, p. 84).

Not surprisingly, in light of the preceding pro and con arguments about markets versus planning, most countries combine elements of both systems as they try to reach their development goals. These nations rely upon "mixed systems." As a group, they differ from one another mostly by the extent to which they rely more on either markets or on planning to foster development. Mixed systems, of course, confront policymakers with the difficult task of determining which mix of central planning and markets yields the greatest progress toward the overall goals of the society. By choosing to mix systems, policymakers are freed from ideological constraints in addressing their economic development goals.

Case Studies

Abstract systems for achieving economic development come alive when they are examined through case studies. Chile, South Korea, Taiwan, Brazil, and the USSR represent examples of experiences with economic development ranging from some to a great deal of success which at the same time represent the spectrum of general options available to developing nations. That spectrum is best visualized as a continuum with very free markets at the one end and very complete planning at the other.

CHILE. The most dramatic experiment to test the impact of a "pure" market-oriented approach to economic development was initiated in 1973 in Chile following the overthrow by a military dictatorship of Salvadore Allende and the socialist economy he instituted. The new government's policies decreased the government share of purchases of the nation's GNP from 41 percent to 20 percent by 1978. Enterprises that the Allende regime bought from private owners were sold back to individual interests very rapidly. In 1973 the government owned 507 firms; by 1977 the government owned only 70, and the aim was to get the number down to 15 by 1980. Tariffs were cut from an average of 94 percent in 1973 to 10 percent by 1979, thereby widely opening the economy to international markets. This step encouraged greater efficiency by compelling Chilean producers to compete with producers in other nations. Government controls of all prices were eliminated and monopolies in business and in labor were broken up. Finally, taxes were slashed and indexed to the cost of living in an attempt to encourage greater efforts from producers and workers by increasing their take-home pay.

The consequences of dramatic shifts in economic policy frequently take time to emerge fully, and the following must be taken as preliminary. Gross national product increased by an average of 7 percent annually from 1976 to 1979, exports increased, and foreign investment in Chilean businesses made it possible for the industrial sector to expand. Less happily, inflation was persistent, never falling below 30 percent; unemployment increased to 34 percent of the work force; economic power became concentrated in fewer hands—despite the breakup of monopolies; and social discord increased in the early 1980s.

SOUTH KOREA AND TAIWAN. To the left of Chile on the continuum of economic systems with which to achieve development stand South Korea and Taiwan. They—with Costa Rica, Hong Kong, and a few others—share the distinction of having used a mix of development policies that produce growth with benefits that are spread fairly evenly throughout the society. Both countries are probably unique in that they started in the early 1950s with skilled work forces, opportunities to build new industrial capabilities (required by the ravages of war in the case of South Korea, and due to resettlement from the Chinese mainland in the case of Taiwan), massive foreign aid, and preferential treatment in the United States for their exports, which they aggressively marketed. The political leadership in both countries encouraged investment in industries and processes that yielded continuous improvements in the production of goods and services. The people in both cases were culturally homogenous as well. (It is only fair to note that the governments of both countries—that of South Korea even more than that of Taiwan—cannot be considered as democratic.)

In addition to the particular conditions mentioned above, the governments played a key role in the development process. In Taiwan, much favorable attention was given by policymakers to the farm population as well as to the development of heavy industry. Part of the attention paid to farmers included the placing of industry in rural areas, thereby providing alternative employment opportunities for farmers and those displaced from farming. The policy also had the effect of preventing a mass exodus of farmers to large cities unprepared to accommodate them with jobs and services. In addition, the technologies introduced through public policy were labor-intensive, that is, they required the employment of many rather than few people.

The results have been remarkable. The growth of Taiwan's real GNP per capita increased from an annual average of 2.6 percent between 1953 and 1966 to an

annual average of 5.5 percent between 1970 and 1977. South Korea did even better. According to the World Bank, South Korea averaged a real GNP growth rate per capita of 11 percent annually in 1974–78, and a somewhat lower but still impressive 7.5 percent in 1978–80.

BRAZIL. Further still to the left on the continuum, Brazil uses a mixed system for economic development. It includes a larger amount of government planning than do Taiwan or South Korea. In an attempt to help markets operate satisfactorily, the government influences the economy by setting prices, wages, taxes, and tariffs; these actions affect the behavior of decision-makers in markets and therefore alter the economy. The government also owns industries, including the electrical, banking, steel, and petroleum industries. Public policies also encourage foreign investment. About 50 percent of the 500 largest companies in Brazil are foreign-owned, and account for nearly half of all sales. Development of the economy is predicated on the sale of exports, and, as a result, consumption of goods and services produced in Brazil, especially consumption by the poor, is discouraged.

Successes and failures co-exist in the Brazilian case. On the plus side, there have been dramatic increases in growth in the major sectors of the economy—ranging from about 4 percent to 10 percent—since 1920. Employment has increased faster than population, thus reducing unemployment. However, these gains have been accompanied by a chronically high inflation rate. It has on occasion exceeded 100 percent per year. Moreover, the distribution of income has become so skewed as to cause an increase in absolute poverty in some areas. In São Paulo, for example, infant mortality rose from 62 to 93 per 1,000 in recent years, probably partly because the share of total income going to the lowest 40 percent of the population fell from 11 percent to 9 percent. And Brazil has borrowed heavily from abroad, contracting debts that the country at times finds difficult to repay.

SOVIET UNION. Because of the dominant role played by its government, the Soviet Union is about as far to the left on the continuum of systems for achieving economic development as any other country. Of course, it is now considered a developed country, but it is instructive to recall briefly how it reached that stage and what problems it still faces.

Following the Russian Revolution of 1918, the new government seized all economic power from private owners by expropriating landed estates and industrial enterprises and then establishing centralized ownership and control. Industry became the favored sector of the economy. Certain key industries (e.g., steel) received the most advanced technology under the assumption that rapid industrialization today would create the capacity for the nation to produce a high level of consumer goods for the Soviet people tomorrow. Military production rather than production for the consumer market became of highest importance as time went on. Agriculture was merely kept at a level sufficient to feed industrial workers well. There were many changes in policy through the years, and the Soviet Union on the whole has made a great deal of economic progress from the conditions prevailing in 1918. But has it been enough?

Some judgments are possible, although data for the Soviet Union are not as freely available as those for most other developed nations and because the numbers which enable many comparative judgments to be made in economics (e.g., prices, wages, exchange rates) are set by the very government whose planning practices one wishes to judge. Notwithstanding these difficulties, one can conclude that through most of its history the Soviet Union has increased the quantity of the goods and services available, although the quality—and sometimes the supply—of these goods and services is a frequent source of grumbling by Soviet citizens. It is clear, as well, that in the sectors of the economy favored by the planners—especially in the output of certain military goods—the Soviet Union successfully produces products that serve their intended purposes. The *official* distribution of income is more equal among citizens in the Soviet Union than it is among citizens in many market-oriented economies. But this leaves out the distribution of perquisites (such as summer homes, access to foreign imports, etc.) to favored individuals such as government officials, scientists, athletes, etc., and the distribution of perquisites is vastly unequal. In fact, for many of the favored, the "perks" are more important than their "regular" incomes. Thus, when perquisites are added to the official income figures, it is likely that one would find a quite unequal distribution of income.

The Soviet Union states that unemployment does not exist there. Apart from the question of whether that is truth or official fiction, many workers are used inefficiently so that widespread underemployment of people exists—a form of hidden unemployment. Finally, as recent experience shows, Soviet agriculture still has many problems. An unusually large percentage of the labor force works on farms, and even so, much grain has fairly often had to be imported.

What can we conclude from this brief examination of the economic systems available to countries when they try to develop? First, as already stated, economic development can take place under a market system, a planning system, or a system that mixes policies from both. Second, if the five cases described here are representative, it is possible that mixed systems that retain important characteristics of a market system are more effective than either pure market or pure planning systems. Mixed systems may be better able to

address simultaneously the variety of goals—e.g., high growth, full employment, a fair distribution of income, price stability—that developing countries typically try to achieve. It is also clear that political stability provides a favorable environment for economic development so long as that stability is not maintained by means that are too repressive or are random and unpredictable.

Economic policymakers in developing countries have a task of great difficulty. They need to be extremely careful that the economic policies they choose produce the results they desire. They need to remember that not all countries that undertake development turn out to be very good at it. They must also take account of how their political system can affect the success of their development policies. And it is likely that the more the purpose of economic development is to enhance the well-being of the inhabitants rather than to aggrandize the power or pomp of the state, the more likely will development take place.

FOREIGN AID: EXPERIENCES AND LESSONS

Despite the fact that government-to-government assistance has been the primary means developed nations have used to assist others in their development, some of the research on the period of the 1950s and 1960s reveals that foreign aid does not make a decisive difference in the ability of a nation to develop economically (Bauer, p.96). In fact, sometimes foreign aid can be harmful.

The possible harmful effects of aid can take several forms. For example, foreign aid in the form of goods that are already being produced in the receiving country, e.g., types of food, can depress prices, discourage producers, and thereby curtail production. Foreign aid designed to encourage saving and investment in new plant and equipment may promote industrialization that backfires because it displaces too much labor and as a result curtails consumption by people who are already poor. Such industrialization may also bring on unnecessary government planning or controls.

It is also widely recognized that aid frequently does not benefit or flow to ordinary people in developing nations but to specific groups that hold political power. The result may not only politicize economic life, but also can encourage the maltreatment—by expropriation and other measures—of economically productive but politically powerless people, especially minorities. In such cases aid usually shields those who pursue practices harmful to economic development from the consequences of their actions.

The Knowledge Factor

In the United Nations and elsewhere emphasis is increasingly being placed upon aid that encourages developing nations to help themselves. Since increased knowledge is necessary to achieve that goal, aid that increases knowledge in the receiving countries is highly important. Some examples include knowledge about how to produce goods and services with less materials, how to use resources that are plentiful and cheap in place of those that are scarce and expensive, how to obtain energy from relatively inexpensive, renewable resources rather than from expensive fossil fuels. Aid of this kind transmits knowledge in order to help developing nations to produce more. And this increasingly ties aid to an output criterion, i.e., the amount of measurable increases in economic development resulting in the receiving countries. This criterion is tending to displace measures of aid from the donor point of view: how large a percent of a donor country's GNP is devoted to aid or how large the contribution of an international agency is.

Knowledge related to development in the ways mentioned above is quite different from knowledge in the form of transfers of relatively advanced technologies. The latter have historically been an important component of foreign aid. Transfers of technology of the types provided in the past have often failed because the form in which the technology was received was inappropriate to local needs and circumstances. As a result, during the 1960s it was commonplace to hear stories about farmers leaving expensive machines to rust in open fields because the farmers didn't really know how to run or repair the equipment, because replacement parts were unavailable, or because the machines had been used for inappropriate purposes.

Technological Assistance

Today, in contrast to the past, technological assistance is made available on the condition that it be accompanied by a description of any policy and institutional changes the receiving country should make in order to use that technology successfully. Another essential difference today is an emphasis upon problems that need to be solved in the receiving country through technology rather than upon transfers of technology without regard for the needs or cultural setting of the receiving country. Since there are usually a variety of technologies which can be employed to

solve most problems, it is obviously desirable to transfer the one with the greatest likelihood of succeeding in the given economic, institutional, social, and ecological context. That is what the contemporary approach to foreign aid endeavors to do.

Technological transfer also depends on the level of literacy or of general education, of skill, of technological know-how, of health, etc., of the people of a society (i.e., on the amount of what economists call "human capital"). Clearly, it is difficult to introduce new technology for either agriculture, industry, or services unless there is a labor force capable of working with such technology or of being trained to do so. That is another "foreign aid lesson" that has been learned.

Aid that takes the existing level of technology and human capital into account often tends to provide developing nations with simpler technology than developed countries use. But just because it may be less complex, more labor-intensive, more subject to local mastery, repair, and control, and more in ecological and cultural harmony with its surroundings than aid provided in the past, today's aid can turn out to be a lot more effective than more advanced technology would be. Today's aid compared with that of the past often focuses more upon agriculture and certainly shows enhanced concern for individual welfare and the actual productivity that a people can achieve. Such emphasis on the quality of aid has brought a corresponding emphasis on how transfers of technology affect the receiving country's society as well as its GNP.

Given the newer emphasis in the available foreign assistance from developed nations, at least two challenges face developing countries. One, they must decide how much outside influence from developed nations they will tolerate in their own economies in exchange for the aid they receive. Memories of colonization are vivid for many present or potential recipients of assistance, and even the appearance of renewed dependence in exchange for outside help may be more than they choose to bear. Second, deeply rooted cultural values and customs may be disturbed by changes made in pursuit of economic development. The reactions to disturbances of this kind may not be easy to control. Such reactions can be profound and last for a considerable period, as occurred in Iran beginning with the Shah of Iran's overthrow in 1979. How developing countries deal with matters of this kind can be expected to have a considerable bearing on how these countries develop in the future.

SOURCES OF FOREIGN AID TO DEVELOPING NATIONS

Foreign aid to developing nations consists chiefly of loans or grants that developed countries lend or give—either directly or through international institutions—to developing countries. Some aid consists of commodities (e.g., food), and some is in the form of training, advice from outside experts, and technological assistance, but most is in the form of money and much of this money is tied to specific projects, e.g., a health program, a highway program, an educational program, the development of a particular industry, etc.

Foreign aid should be distinguished from other *types* and *sources* of funding. The main *type* of funding it excludes is the sort that is available from the International Monetary Fund (IMF). The principal purpose of the IMF, whose members are practically all the governments of the world, is to give short-term financial assistance to countries that are experiencing difficulties in their balances of payments. In lay terms, the IMF helps countries that can't or soon won't be able to meet the current bills they owe to the governments of other countries or to private parties there. Countries that borrow from the IMF must pay back their loans within a few years.

The main *source* of funding that the designation foreign aid excludes is that which flows from private business to developing countries. Such funding chiefly includes the following types of flows: the direct investments corporations make in developing countries for factories and other business facilities; portfolio investments—typically in the form of ownership of shares of stock or of bonds—made in businesses located in developing countries; lending from privately owned banks to developing countries; export credits given by companies that export to developing countries.

Private flows take place in the normal course of business relations between private business in the richer countries and private companies or governments in the developing world. The money involved is the *main source* of outside funds for the less developed world. Such funding in 1978–80 probably exceeded $50 billion per year *net*, (*Statistical Abstract*, 1981, p. 900) that is, after subtracting what developing countries paid back in the form of dividends, interest, or repayment of loans because of previous inflows of private capital from developed countries.

Official foreign aid—or development assistance—came to about $27 billion net in 1980 (*Statistical Abstract*, 1981, p. 900). About $14 billion was given outright by richer countries to poorer countries as grants; another $4 billion was provided in the form of loans. Of the remaining $9 billion or so, the main single other source

was the International Bank for Reconstruction and Development, more familiarly known as the World Bank.

The World Bank

The World Bank principally exists to provide funds for worthwhile projects and programs that contribute to economic development in developing countries. More than 140 countries are members of the World Bank, and all have paid in the funds that constitute the bank's capital. Most of those countries are the very developing countries that benefit from the bank's operations; consequently most of them have paid in comparatively nominal sums. Almost all these funds are in the members' own currencies—currencies which generally are not used in international transactions.

The bulk of the World Bank's capital, about 95 percent, comes from the developed countries. This capital consists of, or can be converted into, currencies that are very much in use or in demand internationally. Besides raising additional capital on occasion, the World Bank more or less regularly adds to its financial resources by borrowing in world financial markets. It typically sells long-term bonds to private lenders in developed nations and lends the proceeds to the developing ones. As a result, the bank is the major *multinational* agency in the world that channels financial resources from developed countries to developing ones. (Among the other multinational agencies are regional banks in Asia, Africa, and Latin America, but all are much smaller than the World Bank.)

The World Bank operates three arms with which to address different needs in developing countries. The principal funder among the three is the International Bank for Reconstruction and Development (IBRD). It grants loans for projects that, after careful analysis, are judged to be capable of facilitating economic development. The bank usually finances only a portion of the cost of such projects; most of the rest comes from the governments of developed countries or from other official international financing agencies. Borrowers must pay a rate of interest that is related to the bank's own cost of borrowing. These loans generally must be repaid in twenty years or less.

For poorer developing countries the bank, through its International Development Association (IDA) arm, makes loans at no interest, which are repayable in fifty years. Some countries, in fact, receive both IBRD and IDA loans. The biggest share of loans made by either arm of the World Bank usually go to agriculture and rural development (e.g. rural roadbuilding or local irrigation). The other major types of projects financed by the bank are for energy, transportation, industrial, and educational projects.

The World Bank disbursed $8.4 billion through the IBRD and IDA in the fiscal year 1982 (July 1, 1981–June 30, 1982). After deducting interest and repayments of principal on past loans and other charges to borrowers, *net* disbursements came to $4.4 billion. Of the total loans made by the World Bank since its establishment after World War II, most have gone to nations in Asia and Latin America. The largest single borrower has been India, followed by Brazil, Mexico, and Indonesia.

The bank's third arm is the International Finance Corporation (IFC). It was established (IBRD Report, 1982, p. 17)

> to further economic development by encouraging the growth of productive private enterprises. In addition to providing and helping raise loan and equity capital, the Corporation works to strengthen the confidence of investors and promote investment opportunities in the developing world. It uses its own resources to assist investors assemble the necessary financing, technology, and management needed for the establishment of productive enterprises.

The IFC approved investments of $612 million in fiscal 1982. Manufacturing endeavors, as usual, got the most money, followed by financing for agriculture and related activities, and financial institutions. The IFC tries to sell its share of the projects in which it engages to private hands as these projects become attractive to investors.

Although the bank has many critics, most observers believe that it has made at least two significant contributions to developing nations. First, it has earned the confidence of lenders that loans made via the World Bank are safe, which has helped increase the flow of funds to developing countries. Second, the bank has made it possible for developing nations to build the roads, waterworks, power plants, and the like on the basis of which other investment—frequently private investment—can occur.

CONCLUSION

Nations endeavoring to develop economically face a staggering array of problems or needs that vastly exceed the resources available to eliminate or ameliorate them. Although progress has been made in slowing the growth of population in many developing countries, much remains to be done to provide the good health, adequate nutrition, and education that is conducive to and a sign of economic development. Resources to improve both economic and social conditions can come in part from developed nations or from international institutions, as they have in the past. However, unless resources received from abroad are

used in a manner that will contribute to a developing nation's ability to increase its own output of goods and services on a continuing basis, economic development will not result. Each nation, through its own institutions—including market forces—must effectively deal with the conditions that must be changed or improved in order for development to take place. Both private and public policies that encourage rather than thwart the required changes must be put in place. A country must also decide what mixture of market forces and of planning it wishes to rely on. This choice normally requires a political decision that will be made democratically in some countries and imposed in others.

Rational and simultaneous decisions on all the issues posed when undertaking economic development would strain the abilities of even the most developed nations. However, most poorer nations today, partly because modern means of communication and transportation make them conscious of the much better conditions that prevail elsewhere, are being forced by both political and economic pressures to somehow achieve development. It is a difficult goal to reach, especially for the least well-off nations. Some may never really develop economically; some may take an inordinately long time to achieve it.

But there is hope. There is a roster of relatively great successes, among them South Korea, Taiwan, Brazil, Hong Kong, and Singapore. And more moderate success has been achieved in countries such as Malaysia, India, Algeria, Tunisia, and Colombia. Some of these countries will have setbacks, such as Mexico began to face in 1982. However, the record seems to show that, on the whole, the ranks of countries that begin and then go on to improve their economic well-being will continue to swell. The record also suggests that achieving economic progress may be slow and often painful for most countries.

BIBLIOGRAPHY

Avila, Manual. "Smith and Underdeveloped Nations." *Review of Social Economy* (1976), 345–358.

Bacon, Donald C. "Poor Versus Rich, A Global Struggle." *U.S. News & World Report*, July 31, 1978, 55–63.

Bauer, P. T. *Dissent on Development*. Cambridge, Mass.: Harvard University Press, 1976.

Bauer, P. T., and B. S. Yamey. "East-West/North-South: Peace and Prosperity." *Commentary*, September 1980, 57–63.

Benedick, Richard. "U.S. International Population Policy." *Department of State Bulletin*. September 1980, 57–61

Briggs, B. Bruce. Book review of *The Ultimate Resource*, by Julian Simon. *New York Times Book Review*, September 13, 1981.

Chenery, Hollis. "Poverty and Progress—Choices for the Developing World." *Finance and Development*, June 1980, 12–17.

Cousins, Norman. "Winning the War Against Famine." *Saturday Review*, November 25, 1978, 9.

Crabbe, Pierre; Egon Diczfalusy; and Carl Djerassi. "Injectable Contraceptives Synthesis: An Example of International Cooperation." *Science*, August 29, 1980, 992–994.

Dadsie, K. K. "Economic Development." *Scientific American*, September 1980, 58–65.

Enke, Stephen. "Economists and Development: Rediscovering Old Truths." *Journal of Economic Literature*, December 1969, 1125–1136.

Griffin, Keith. "Economic Development in a Changing World." *World Development*, March 1981, 221–226.

Guest, Iain. "The Water Decade, 1981–90." *World Health*, January 1979, 2–5.

Gurley, John G. "Economic Development: A Marxist View." In *Directions in Economic Development*, edited by Kenneth Jameson and Charles K. Wilbur. Notre Dame, Ind.: University of Notre Dame Press, 1979.

Hagen, Everett. *The Economics of Development*. Homewood, Ill.: Irwin Publishing Company, 1980.

Harrison, Paul. "Home Grown Foods." *World Health*, August 1979, 4–9.

Healey, Derek. "Development Policy: New Thinking about an Interpretation." *Journal of Economic Literature*, September 1972, 757–797.

Hughes, H. "Debt and Development: The Role of Foreign Capital in Economic Growth." *World Development*, September 1979, 95–112.

IBRD Atlas. International Bank for Reconstruction and Development/World Bank. *ATLAS: Gross National Product, Population, and Growth Rates*. Washington, D.C.: IBRD/World Bank, annual.

IBRD Report. *World Development Report*. New York: Oxford University Press, annual.

Leff, Nathaniel. "Entrepreneurship and Economic Development: The Problem Revisited." *Journal of Economic Literature*, March 1979, 46–64.

Koyfitz, Nathan. "World Resources and the World Middle Class." *Scientific American*, July 1978, 28–35.

MacBean, A. I., and N. Snowden. *International Institutions in Trade and Finance*. London: George Allen & Unwin, 1981.

Mahler, Halfdan. "People." *Scientific American*, September 1980, 66–77.

North, Douglas. "Economic Growth: What Have We Learned from the Past?" *Journal of Monetary Economics*, September 1977, 157–177.

Overseas Development Council. *U.S. Foreign Policy and the Third World: Agenda 1982*. New York: Praeger, 1982. (Published annually; variously titled.)

Schultz, Theodore W. "The Economics of Being Poor." *Bulletin of the Atomic Scientists*, November 1980, 32–37.

Scrimshaw, Nevin S., and Lance Taylor. "Food." *Scientific American*, September 1980, 78–99.

Simon, Julian L. *The Ultimate Resource*. Princeton, N.J.: Princeton University Press, 1981.

Society. "Declining Fertility." September 1979, 2–3.

Statistical Abstract of the United States. U.S. Department of Commerce, Bureau of the Census. Annual.

Szmanti, Harry H. "Foreign Aid Support of Scientific and Economic Growth: Support of Chemistry in Latin America." *Science*, March 17, 1978, 1173–1182.

Todaro, Michael P. *Economic Development in the Third World*, 2nd ed. New York: Longman Inc., 1981.

TRB (Richard Lee Strout). "Population Control." Editorial in *New Republic*, April 18, 1981, 4.

U.N. Office of Public Information. "Need for Rapid Economic Growth in Developing Countries Said Urgent." *U.N. Chronicle*, March 19, 1978, 24.

Watts, Geoff. "The Global Health Care Challenge." *Atlas World Press Review*, October 1978, 23–26.

Weaver, James, and Kenneth Jameson. *Economic Development: Competing Paradigms*. Washington, D.C.: University Press of America, 1981.

Weintraub, Sidney. "Demands from Poor Countries: Responses by Rich Ones." *Challenge*, September-October, 1978, 61–63.

Weiss, Charles Jr. "Mobilizing Technology for Developing Countries." *Science*, March 16, 1979, 1083–1089.

World Health. "Four U.N. Strategies to Attack Poverty." February 1978, 36.

32

INSTRUCTIONAL ACTIVITIES

PHYLLIS BAILEY

RATIONALE AND OBJECTIVES

Quite naturally, the poorer nations of the world want to achieve economic development, i.e., become less poor. As members of the world community, students should understand the needs and aspirations of such countries. That understanding should encompass the data as well as the problems and complexities of the developmental process. Obviously, it is essential that students relate the economic development of each nation to the particular conditions there and also take into account patterns common to all developing nations. The extreme importance of laying ethnocentrism aside when analyzing a country's economic development efforts should also be obvious.

The instructional activities that follow were conceived in the foregoing spirit. They are also designed to let students progress from simple to complex ideas and from descriptive to analytical material. The initial activities introduce students to such tools as statistical indexes and a historical model of development. In subsequent activities, students engage in comparative study of several economies as well as of two key problems faced by many developing nations—how to increase agricultural output, chiefly food, and how to keep population from growing too rapidly. It is essential that the instructor act as a facilitator by raising questions, presenting evidence, and the like, but letting students come to their own conclusions about how economic development can best take place.

Instructional Objectives	Related Instructional Activities
Students will be able to:	
1. Differentiate between developed and developing countries by selecting the characteristics specific to each type;	1, 2
2. Define developed and developing countries;	1, 2
3. Describe and explain factors that govern a country's rate of economic development;	1, 3, 5, 6
4. List the five stages of Rostow's model of economic development;	3
5. Describe personal economic choices and trade-offs people in a developing country might face as its economic development proceeds;	4
6. Explain the role of food production in economic development;	5
7. Present a brief history of population growth;	6
8. Distinguish between population trends in developed and developing countries;	6
9. Describe the implications of current population trends for economic development.	6

All the handouts and visuals for the instructional activities are on perforated sheets at the back of this volume.

Instructional Activity 1

DISTINGUISHING BETWEEN DEVELOPED AND DEVELOPING COUNTRIES: AN INTRODUCTION

Recommended Use:	As a lesson with which to begin the study of economic development. Appropriate for world history or senior economics courses.
Time Required:	One class period.
Materials Required:	Pictures of products or public facilities.
Rationale:	This opening lesson draws upon students' prior knowledge to begin establishing preliminary definitions of economic development before looking at various measures of development.
Concepts:	Developed countries, developing countries, economic development process.
Instructional Objectives:	1. Distinguish between characteristics of developed countries and developing countries; 2. Develop preliminary definitions of developed countries (DC) and developing (DVG) countries; 3. Develop a preliminary definition of some factors involved in economic development.

Teaching Strategy

1. Prior to this teaching activity collect and mount pictures representing such products or public facilities as the following:

   automobile, calculator, TV set, dishwashing powder, modern farm machinery, ranch home or solar house, typical store bill, charge card, modern school, lawn mower, super highway, spinning wheel, pottery jar, wicker basket, crude sampan or similar type of boat, dusty road, village well, horse drawn cart, hoe.

   After preparing the pictures, number them consecutively and scramble them so that those characteristic of developed countries are intermingled with those characteric of developing countries. Display the pictures around the room.

2. Have students analyze the pictures in light of their answers to the following questions:

   - Which pictures illustrate similar levels of economic development?

Pupil Activity

Students should begin to analyze the pictures placed around the room.

Students should analyze the pictures. In this process they should arrive at the groupings Developed Countries and Developing Countries.

- Into what groupings do the pictures seem to fall?
- On what basis or criteria did you arrive at these groupings?
- What headings might you assign to these groupings?

NOTE: You may need to steer students to use these groupings.

3. At this point place the headings "Developed Countries (DC)" and "Developing Countries (DVG)" on the chalkboard. Divide the class into two groups, one for each heading. Instruct each group to think of descriptive phrases for its assigned heading and to write the phrases on the chalkboard under the appropriate heading.

   (NOTE: It may be necessary to provide an example for each group; e.g., *Characteristics of DCs:* mechanical appliances; *Characteristics of DVGs:* simple farming tools.)

   After the groups have developed their descriptive phrases, conduct a review discussion of them. From the discussion, develop a preliminary definition of "the process of economic development" implied by the pictures. The definition should include such activities as:

   establishing industries, improving agricultural techniques, establishing improved communication and transportation systems, increasing productivity, and raising management and technical skills.

   Characteristics of DCs such as the following should appear in the DC list:

   advanced technology, mass production, mechanical appliances, mechanized agriculture, modern housing, complex consumer goods, mass education.

   Characteristics of DVGs such as the following should appear in the DVG list:

   lack of industrial development, poor systems of communication and transportation, nonmechanized agriculture, high rate of illiteracy, comparatively low living standards.

4. *Evaluation:* Have students review the definitions as well as the characteristics of the DCs and DVGs. Then ask them to locate pictures of additional products or facilities characteristic of DCs, discuss them, and add them to the DC list.

   Students should mention such products or facilities as fast-food restaurants, hospitals, other medical care facilities, stereos, etc.

Instructional Activity 2

USING STATISTICAL INDICATORS TO MEASURE ECONOMIC DEVELOPMENT

Recommended Use:	In world history or senior economics courses.
Time Required:	Two class periods.
Materials Required:	Handouts 2-1, 2-2, 2-3, and 2-4
Rationale:	Students should be able to use various statistical indicators to measure the level of economic development of a country. They should become familiar with the definition and characteristics of the DCs and DVGs while recognizing that there are sometimes difficulties in classifying economies.
Concepts:	Statistical indicators, developed countries (DCs), developing countries (DVGs), economic development.
Instructional Objectives:	After analyzing the information in the handouts, students will be able to: 1. Define the terms statistical indicators, economic development, DCs, DVGs; 2. Classify economies according to their characteristics; 3. Understand that a poorer country may be described as developing if it produces more goods and services per capita practically every year, i.e., "real" GNP per capita keeps rising (see the Overview Introduction.)

Teaching Strategy

1. Discuss the meaning of the term *statistics*. Clarify the meaning by asking students to provide examples of statistics with which they are familiar.

2. Distribute Handout 2-1, "Two Economies: A Comparison," and explain each of the statistical indicators of economic development that it contains. To aid students to analyze the data in the handout, ask such questions as:

   - What is the significance of life expectancy statistics and infant mortality rates?
   - Which country has the smaller population per physician?

Pupil Activity

Students should define the term statistics as "the classification of facts based on the number of occurrences."

Answers to the suggested questions are:

They indicate the level of such things as medical care, medical facilities, and diet available in a country.

Sweden.

- What does the term *per capita income* mean?

Total income earned by the residents in a country divided by its population. Usually, the higher a country's per capita income, the more developed it is considered to be.

- Judging by the data in the handout, which country is more developed?

Sweden.

3. Divide the class into small groups. Distribute Handouts 2-2 and 2-3. Assign responsibility for columns 3–5 to one third of the group, columns 6–8 to another third, and columns 9–11 to the last third. Go over the instructions that accompany the worksheet with the class. Then have the groups complete the sheets. Reassemble the class and go over the answers: project a transparency of the blank worksheet, and as group reporters contribute answers, fill in the blanks on the transparency. (NOTE: The statistics for Sweden and Brazil are not the same in Handout 2-1 as in Handout 2-2 because the data cover different years and, in some instances, the underlying concepts in the two handouts differ.)

Students work in groups to complete the worksheets.

To guide students in distinguishing between developed and developing countries, conduct a discussion in order to compile two lists, one describing characteristics of DCs and the other describing those of DVGs.

Students should list the following as characteristics of developed countries:

High level of per-capita GNP; rates of growth differ
Low population per physician
Low infant mortality rate
High life expectancy
High literacy rate
High energy consumption per capita
Low percent of labor force in agriculture
High percent of labor force in services and in industry

The list of characteristics of developing countries should include:

Low level of per-capita GNP; rates of growth differ
High population per physician
High infant mortality rate
Low life expectancy
Low literacy rate
Low energy consumption per capita
High percent of labor force in agriculture
Low percent of labor force in services and in industry

4. *Evaluation.* Distribute Handout 2-4 and have students explain how these statistical indicators reflect the level of economic development in a country.

Handout 2-3

WORKSHEET: COUNTRIES WITH HIGHEST AND WITH LOWEST CAPITA GNP

Name of Country (1)	GNP per Capita (US$) (2)	Per Capita GNP Growth (%) (3)	Population per Physician (4)	Infant Mortality Rate (5)	Life Expectancy (6)	Adult Literacy Rate (7)	Per Capita Energy Consump (8)	Labor Force Participation		
								% in Ag. (9)	% in Services (10)	% in Industry (11)
	A. In decreasing order: Countries with highest per capita GNP									
W. Germany	13,590	H	L	L	H	H	H	L	H	H
Sweden	13,520	L	L	L	H	H	H	L	H	H
U.S.	11,360	L	L	L	H	H	H	L	H	H
Canada	10,120	H	L	L	H	H	H	L	H	L
Japan	9,890	H	L	L	H	H	H	L	H	H
Australia	9,820	H	L	L	H	H	H	L	H	H
Gt. Brit.	7,920	L	L	L	H	H	H	L	H	H
	B. In increasing order: Countries with lowest per capita GNP									
Ethiopia	140	L	H	H	L	L	L	H	L	L
Zaire	220	L	H	H	L	L	L	H	L	L
India	240	L	H	H	L	L	L	H	L	L
China	290	L	H	H	L	L	L	H	L	L
Uganda	300	H	H	H	L	L	L	H	L	L
Kenya	420	H	H	H	L	L	L	H	L	L
Indonesia	420	H	H	H	L	L	L	H	L	H

Instructional Activity 3

STAGES OF ECONOMIC DEVELOPMENT

Recommended Use: In economics or in world history courses.

Time Required: Two class periods.

Materials Required: Handout 3-1.

Rationale: The purpose is to introduce the concept of economic development as a continuous process involving many factors over a long period of time.

Concepts: Economic growth, incentives, disincentives.

Instructional Objectives: Students will be able to:

1. Describe the stages of economic growth as presented by W. W. Rostow.
2. Enumerate the variety of factors involved in a nation's economic development over a period of time;
3. Point to selected factors or conditions as either incentives or disincentives to economic development;
4. Classify certain nations' economies according to Rostow's model;
5. Understand that Rostow's analysis is controversial and is not accepted by all economists or historians, and that it is presented here because it is a useful frame of reference for students.

Teaching Strategy

1. Distribute Handout 3-1, "Rostow's Stages of Economic Growth." Emphasize to students that the handout briefly describes the stages through which the developed nations have historically progressed. Explain that Rostow's stages-of-growth idea is not accepted by all economists or historians, but that it will be helpful to students as a way to organize information about economic growth (see COMMENT on page 34).

2. After students have completed the reading have them develop a series of descriptive phrases for each stage of economic development. Emphasize that the phrases should describe the economic, political, and social characteristics of each stage.

3. Conduct a class discussion to summarize the reading, using such questions as:

Pupil Activity

Students read the handout.

In classroom discussion, students answer the specific questions that follow the description of each stage.

Students suggest a set of descriptive phrases for each stage of development and develop a table that lists the characteristics of each stage.

- What factors encouraged economic development?

Students should name the following as factors encouraging economic development: inventions, international trade, a new class of entrepreneurs, development of banking systems and markets, increased transportation and communication, mechanization of agriculture, the development of stable governments, changing value systems.

- What factors discouraged economic development?

Students should name the following as factors discouraging economic development: emphasis on manual agriculture, lack of modern technology, lack of stable governments, emphasis on a traditional value system.

4. *Evaluation:* Have students classify the economies of various countries based upon the historical model presented. Assign a range of economies, e.g., traditional China, ancient civilizations of Africa, medieval Europe, nineteenth-century Europe, West Germany, Japan, India, Pakistan, Kenya, Argentina, etc. Encourage students to use a variety of sources, including appropriate history books or texts to aid in the classification.

Students should investigate the economies, place each economy in the appropriate stage of development, and be prepared to justify their placements.

COMMENT

Does Rostow's model of the stages of development provide useful insights into the development process? There is no doubt that it does. However, the model suffers from at least two important shortcomings. These may impede its use as a guide for formulating public policy.

1. Economic development cannot be divided into precise stages. Growth is a continuous process, not a discrete one. Therefore, any attempt to separate it into distinct periods must be highly arbitrary. No two individuals viewing the past growth of a society would necessarily agree on the exact points at which one stage ended and another began. Nor would any two individuals necessarily agree on whether the society even experienced a particular stage.

2. It is not necessary for investment to rise rapidly before sustained growth can take place, as occurs in Rostow's take-off stage. Some countries have experienced steady development resulting from gradually rising levels of investment over a long period. Nor is it necessary for an agricultural revolution—a modernization of farming techniques—to precede an industrial revolution in order for resources to be transferred from the rural to the industrial sector . . . [E]xperiences of LDCs since World War II indicate that agriculture and industry may expand simultaneously while sustained development is taking place.

—Milton Spencer, *Contemporary Economics*, 5th ed. (New York: Worth, 1983), pp. 784–785.

I cannot emphasize too strongly at the outset, that the stages-of-growth are an arbitrary and limited way of looking at the sequence of modern history: and they are, in no absolute sense, a correct way. They are designed, in fact, to dramatize not merely the uniformities in the sequence of modernization but also—and equally—the uniqueness of each nation's experience.

—W.W. Rostow, *The Stages of Economic Growth*, 2d ed. (New York: Cambridge University Press, 1971), p. 1.

Instructional Activity 4

ECONOMIC DEVELOPMENT FROM A PERSONAL PERSPECTIVE

Recommended Use: In world history or senior economics courses.

Time Required: Two class periods.

Materials Required: Handouts 4-1 through 4-8

Rationale: The class analyzes a set of scenarios. Students take roles as individuals who must make economic decisions that will have a great effect on their lives and may also affect the economies of the countries they live in.

Concepts: Decision-making, opportunity cost, economic development issues, investment.

Instructional Objectives: Students will be able to:

1. Describe the situation in each scenario;
2. State the economic development issue involved in each scenario;
3. Explore the options in each scenario before reaching an economic decision;
4. Explain what effect the individual's decision in each scenario might have on the economy of the area.

Teaching Strategy

1. Divide the class into groups of three. Tell students that they will be investigating some case studies in which an individual is faced with a decision that illustrates the personal implications of economic development. Emphasize that they are to assume the role of that individual within the context of that particular culture as they make a decision. At this point distribute Handouts 4-1, 4-2, and 4-3, on decision-making in the Philippines, Bolivia, and Upper Volta; assigning a different handout to each group member. Also distribute one copy of Handout 4-7 to every student. Have students take appropriate notes on the story as directed in Handout 4-7.

2. Review the jigsaw procedure of group discussion. This procedure enables students to become acquainted with more information on a given topic than they would be able to acquire on their own. In the present activity utilize the jigsaw approach by instructing each member of each group of three to present and discuss a different one of the three

Pupil Activity

Students read and take notes on their assigned case study.

Students should assume responsibility for providing information to other group members and for conducting a discussion on their case study.

case studies for the benefit of the other members. Each person who reads an assigned scenario becomes the "expert" on it. All three scenarios should be discussed in this manner in each group.

Distribute Handout 4-8 and direct students to complete the table during the group discussion. Encourage students to ask questions of each "expert."

Group members work together to complete Handout 4-8.

3. Conduct a summary discussion of the three cases with the whole class using such questions as:

   a. What are some implications for the individual of the economic development processes described in these cases?

   b. What evidence was there of changing values and relationships? What are the economic implications of these changes for both the individual and the economy as a whole?

   c. The concept of opportunity cost is implicit in these case studies. Ask students to recall and describe specific instances of opportunity costs.

Students should generalize from the case studies, utilizing their discussion notes. In addition, they should give a definition and an example of the term "opportunity cost." (Opportunity cost refers to what must be given up, that is, the next most attractive use of the resource, when decisions are made to use scarce resources for one purpose rather than another.)

4. Utilize the same research and discussion procedure for the three additional case studies. These focus upon economic decision-making in a larger context. They deal with choices faced by individual business owners and by a village council, and thus give students the opportunity to explore additional aspects of economic development. Distribute Handouts 4-4, 4-5, and 4-6 as well as fresh copies of Handouts 4-7 and 4-8, if needed.

Students take notes on their assigned case studies. Students should assume responsibility for providing information to the other group members and for conducting a discussion on their assigned case study.

5. Conduct a summary discussion of the second set of three cases with the whole class, using such questions as:

   a. How were the economic choices faced by the individuals in the second group of case studies similar to or different from those faced by individuals in the first group?
   b. What additional implications of economic development do the stories in the second group stress?
   c. What economic incentives were mentioned in the whole set of case studies?

Instructional Activity 5

AGRICULTURE AND THE FOOD SUPPLY

Recommended Use: World history or senior economics courses.

Time: Two class periods.

Materials Required: Handouts 5-1, 5-2, 5-3.

Rationale: Increasing agricultural production is significant to economic development for three reasons. First, many developing nations do not produce sufficient food to feed their populations adequately. As populations in these countries grow, the need for food becomes even more vital. Second, increases in agricultural production can raise the incomes of farmers as well as provide additional jobs for part-time or unemployed rural workers. Third, as food supplies grow, workers can move from farm to industrial pursuits. Opinions on these matters vary. Students should become aware of the possible problems and viewpoints.

Concepts: Economic growth, productivity, unemployment.

Instructional Objectives: Students will be able to:

1. Discuss the possibilities regarding the sufficiency of food supply in the developing countries several decades ahead;
2. Describe the changes that developing countries must undergo to increase food production;
3. Compare the strategies in Handout 5-2 with those in Handout 5-3.

Teaching Strategy:

1. Distribute Handout 5-1. Introduce the varying viewpoints on the scope of the future "food problem" by having students read and analyze the handout. Then ask:
   - How are data on the same subject interpreted differently by Global 2000 and by Kahn and Schneider?
   - Based on your prior knowledge, with which point of view do you agree? Why?
   - What additional information would you need in order more accurately to react to and evaluate the two points of view?

Pupil Activity

Students should begin analysis of two points of view regarding the food problem. They should recognize that the same data can be interpreted in several ways, depending upon the individuals analyzing the data and their viewpoints.

Students should indicate that they would need to locate information on such subjects as:

- The projected world population in 2000
- The projected number of people in the developing countries by 2000

- The prospects for annual total and per capita food *production* in developed and developing countries
- Annual per capita food *consumption* in developed and developing countries
- Projected improvements in agricultural technology
- Projected increases in agricultural productivity

3. Distribute Handout 5-2 and have students read it in light of:
   - The key components of Heilbroner's model of development
   - The ways in which he feels this model answers the question of how a developing economy can build capital
   - The role of government
   - The relationship of agricultural development to industrial development.

Students should be able to describe the significance of such concepts as hidden surplus of labor, increased productivity, internal migration, capital building, to Heilbroner's model of development.

4. Distribute Handout 5-3 and discuss the seven basic hypotheses contained in the handout. Then divide the class into seven groups. Assign each group to investigate one hypothesis and to consider its applicability and usefulness to developing countries.

   Refer students again to Handout 5-2. Have each group examine Heilbroner's model of economic development in the light of Ensminger's hypotheses.

One member of each group summarizes its conclusions.

5. *Evaluation:* Have students prepare one-page statements comparing the Heilbroner and Ensminger points of view.

Instructional Activity 6

THE POPULATION ISSUE

Recommended Use: In world history or senior economics courses.

Time Required: Two class periods.

Material Required: Visuals 6-1, 6-2; Handout 6-1.

Rationale: Many developing countries face the problem of a high rate of population increase. Even if developing countries experience economic growth, rapid population increase decreases the benefits on a per capita basis. Economic growth itself, in its early years, tends to contribute to a rise in population through better health care and living conditions.

Concepts: Population growth.

Instructional Objectives: Students will be able to:

1. Understand the history of population growth;
2. Understand the current trend of population growth and distinguish between the population trends in developing countries and in developed countries;
3. Grasp the implications of current trends in population growth.

Teaching Strategy:

1. Project a transparency of Visual 6-1. Have students read and analyze each fact in terms of what it indicates about the population growth rate and the doubling time (in years). Based on the facts presented have students organize the data into a table with the column headings as those in the completed version shown on the right. If necessary, aid students in computing the doubling time. (To find the number of years it takes for any quantity to double, divide its annual growth rate into 70.) Then conduct a discussion and ask:
   - When has the annual percentage growth rate shown extraordinary increases?
   - What factors might have accounted for these increases?
   - What does a comparison of the growth rate of the richest countries with that of the poorer countries indicate?
   - What is the potential impact of this difference in growth rates?

Pupil Activity:

Students complete a table comparing the growth rate for various historical periods. As part of the analysis, students compute the doubling time in years in order to determine the impact of the growth rate. The completed table should appear as follows:

Time Period	Annual Growth Rate Percent	Doubling Time in Years
1. Early historical times	0.002	35,000
2. 1650–1750	0.3	233
3. 1850–1900	0.6	117
4. 1930–1940	1.0	70
5. Currently richest	1.0	70
6. Currently poorer	2.0	35
	2.5	28
	3.0	23

To reinforce student comprehension of population increase, project Visual 6-2. Have students discuss the implications of both the numbers of people involved and the doubling rate for (1) the developed countries and (2) the developing countries.

Students should infer that the population of developed countries will grow slowly or stabilize. The population of developing countries will grow comparatively rapidly and become a larger portion of the world's total population. Students should then hypothesize about the possible consequences of these two possibilities.

2. Distribute Handout 6-1. Have students locate the geographical areas it refers to on a wall map. Then introduce PQL, the Physical Quality of Life index. Ask students to speculate about the components that the PQL index might comprise. Then explain that it is a simple average of infant mortality, life expectancy at age 1, and literacy, with equal weight given to each. For this purpose, the components were converted to a scale ranging from 0 to 100. Zero is designated as the worst experience observed since the end of World War II and 100 as the best experience anticipated by the end of the century.

Students analyze the data in terms of:

- How much more rapid the population increase is in the developing areas than in the developed ones;
- The two areas with the lowest annual rates of increase;
- The two areas with the highest rates of increase.

Have students use the PQL index as well as other information in the handout to determine the relative health, social, and economic status of the various regions for which the handout provides data.

3. *Evaluation:* Have each student develop a series of statements which summarize the various aspects of the "population problem" that have been explored. Emphasize that these statements should be in the form of generalizations that include all parts of each aspect of the problem.

Students should include statements dealing with:

- doubling rate
- rate of population increase
- PQL index
- other aspects of the status of populations
- relationship of economic development and population growth

Handout 2-1

TWO ECONOMIES: A COMPARISON
(as of Mid-1970s)

	Sweden	Brazil
Population (in millions)	8.2	108.5
Per capita income (in U.S. dollars)	10,100	1,452
Growth of per capita income	1.6%	6.2%
Population per physician	690	1,811
Infant mortality rate (per 1000 live births)	10	94
Life expectancy (years)	73	61
Percent literate	99%	66%
Per capita energy consumption (millions of BTU's)	80	15
Military expenditures per capita (U.S. dollars)	343	18
Percent of labor force in agriculture	7%	44%
Percent of labor force in service industries	65%	44%
Percent of labor force in manufacturing	28%	12%

SOURCE: World Bank.

Handout 2-2

STATISTICAL INDICATORS OF DEVELOPMENT

(1)	GNP per Capita (U.S. $) (2)	Per Capita GNP Growth (%) (3)	Population per Physician (4)	Infant Mortality Rate (per 1000 live births) (5)	Life Expectancy at Birth (yrs.) (6)	Adult Literacy Rate (%) (7)	Per Capita Energy Consumption[b] (8)	% Labor Force in Agriculture (9)	% Labor Force in Services (10)	% Labor Force in Industry (11)
	1980	a	1977	1980	1980	1977	1979	1980	1980	1980
North America										
United States	11,360	2.3	580	13	74	99	11,681	2	66	32
Canada	10,130	3.3	560	11	74	99	13,164	5	66	29
Latin America										
Brazil	2,050	5.1	1,700	77	63	76	1,018	30	46	24
Mexico	2,090	2.6	1,260	56	65	81	1,535	36	38	26
Guatemala	1,080	2.8	2,560	70	59	n.a.	229	55	24	21
Peru	930	1.1	1,530	88	58	80	716	40	41	19
Western Europe										
Great Britain	7,920	2.2	750	12	73	99	5,272	2	56	42
Italy	6,480	3.6	490	14	73	98	3,312	11	44	45
Sweden	13,520	2.3	560	7	75	99	8,258	5	61	34
West Germany	13,590	3.3	490	14	73	99	6,264	4	50	46
Africa										
Ethiopia	140	1.4	74,910	146	40	15	20	80	13	7
Ivory Coast	1,150	2.5	21,040	127	47	41	230	79	17	4
Kenya	420	2.7	11,630	87	55	50	172	78	12	10
South Africa	2,300	2.3	n.a.	96	61	n.a.	2,895	30	41	29
Uganda	300	−0.7	26,810	97	54	48	39	83	11	6
Zaire	220	0.2	15,530	112	47	58	100	75	12	13
Algeria	1,870	3.2	5,330	118	56	35	645	25	50	25
Nigeria	1,010	4.1	15,740	135	49	30	80	54	27	19
Asia and Middle East										
Egypt	580	3.4	1,050	103	57	44	539	50	20	30
Syria	1,340	3.7	2,570	62	65	58	925	33	36	31
India	240	1.4	3,630	123	52	36	194	69	18	13
China	290	2.8	1,100	56	64	66	734	71	12	17
Indonesia	430	4.0	13,670	93	53	62	225	58	30	12
Japan	9,890	7.2	850	7	76	99	4,048	12	49	39
Philippines	690	2.8	2,810	55	64	75	329	46	37	17
Thailand	670	4.7	8,220	55	63	84	353	76	15	9
South Korea	1,520	7.0	1,980	34	65	93	1,473	34	37	29
Oceania										
Australia	9,820	2.7	650	11	74	100	6,539	6	61	33
Eastern Europe										
USSR	4,550	4.0	290	27	71	100	5,793	14	41	45
East Germany	7,180	4.7	530	12	72	n.a.	7,136	10	40	50
Poland	3,900	5.3	610	21	72	98	5,752	31	30	39

n.a. = not available.

SOURCE: World Bank, *World Development Report 1982* (New York: Oxford University Press, 1982), Tables 1, 7, 19, 21, and 22; used by permission.

[a]Average annual growth in GNP per capita, 1960–80.

[b]Kilograms of coal equivalent.

Handout 2-3

WORKSHEET: COUNTRIES WITH HIGHEST AND WITH LOWEST CAPITA GNP

Name of Country (1)	GNP per Capita (US$) (2)	Per Capita GNP Growth (%) (3)	Population per Physician (4)	Infant Mortality Rate (5)	Life Expect-ancy (6)	Adult Liter-acy Rate (7)	Per Capita Energy Consump (8)	Labor Force Participation		
								% in Ag. (9)	% in Services (10)	% in Industry (11)
	A. In decreasing order: Countries with highest per capita GNP									
	B. In increasing order: Countries with lowest per capita GNP									

From *Analyzing Growth Policies of Developing Countries: A Resource Guide*, EPS Series. 1983. Published by the Joint Council on Economic Education, 1212 Avenue of the Americas, New York, New York 10036.

Handout 2-3 (continued)

Instructions for completing worksheet:

NOTE: Before you begin, select one member of your group to serve as reporter to the class on your findings.

1. Pick out the seven countries with the highest GNP per capita from Handout 2-2. List these countries by *decreasing* size of GNP per capita in the spaces provided in Column 1 of Part A of the worksheet. In Column 2, write the corresponding amounts of GNP per capita.
2. Next, pick out the seven countries with the lowest GNP per capita and list them by *increasing* size of GNP per capita in the spaces provided in Column 1 of Part B of the worksheet. In Column 2, write the corresponding amounts of GNP per capita.
3. Look at the data in the first column of Handout 2-2 assigned to your group. For all the countries you listed in steps 1 and 2, copy the figures in that column in the corresponding column of your worksheet. Place an *H* next to the seven highest and an *L* next to the seven lowest figures, preferably in color.
4. Follow the same procedure as in Step 3, above, for each set of data in the other two columns assigned to your group.

From *Analyzing Growth Policies of Developing Countries: A Resource Guide*, EPS Series. 1983. Published by the Joint Council on Economic Education, 1212 Avenue of the Americas, New York, New York 10036.

Handout 2-4

Statistical Indicators of the Quality of Life, Selected Countries
(most recent estimates as of 1981)

Country	Infant Death Rate	Life Expectancy at Birth	Adult Literacy Rate
India	12%	51 years	36%
Malawi	14%	46 years	25%
Kenya	5%	53 years	40%
Indonesia	9%	47 years	62%
Egypt	11%	54 years	44%
Bolivia	16%	52 years	63%
Nigeria	16%	48 years	not available
Ecuador	7%	60 years	74%
Malaysia	3%	67 years	60%
Korea (Republic)	4%	63 years	93%
Mexico	6%	65 years	76%
Brazil	9%	62 years	76%
Soviet Union	4%	70 years	99%
Japan	1%	76 years	99%
Saudi Arabia	12%	53 years	15%
Germany (Federal Republic)	2%	72 years	99%
United States	1%	73 years	99%

SOURCE: *The Developing World*, World Bank Educational Materials (Washington, D.C.: The World Bank, 1981), Table 2; used by permission.

Handout 3-1

ROSTOW'S STAGES OF ECONOMIC GROWTH

STAGE 1. TRADITIONAL SOCIETY

Life in a traditional society is one of little change. The size of the population and the quality of life fluctuate according to the outcome of harvests, wars and outbreaks of disease, and whether social unrest exists. Varying types of industry develop but productivity (output per unit of labor and other resources used to produce goods or services) is limited owing to the lack of modern technology. A traditional society lacks the capacity to produce an increasing quantity of goods and services.

Due to the limited productivity a high percentage of a traditional society's resources must be devoted to agriculture. The social organization is characterized by strong family and clan ties. The system doesn't change much so there are limited opportunities for improving one's condition.

Often the control of real political power is in the hands of the landowners. These individuals are generally supported by the civil service and the military as they seek to influence the existing central political power. Landowners tend to try to protect their own economic interests, and consequently try to block the growth of such nationwide economic institutions as trade and banking.

Historically, traditional societies include the Chinese dynasties, early Middle Eastern civilizations, and European feudalism.

Questions for discussion:

1. How would you define the term *traditional*?
2. What impact would the value system of a traditional society have upon economic development?
3. How might conditions in a traditional society serve to discourage economic development?
4. What more recent societies might be classified as traditional according to the criteria established in this reading?

STAGE 2. GETTING READY FOR TAKEOFF

In this second stage of growth, the society is in the process of change but needs time to transform its political and economic systems. This transformation is necessary before science and technology can be adapted to its needs.

The prerequisites of economic takeoff were first apparent in western Europe in the late seventeenth century. At that time, new fundamental scientific knowledge was being discovered and spread. This knowledge plus important inventions began to make industry and agriculture more productive. A search for new markets and resources and the competition for their control provided further stimulation for increased productivity. As a result, certain structural changes occurred in societies undergoing economic growth:

- the rise of a new class of entrepreneurs who invested savings and took risks in order to make a profit;
- the appearance of banks and other capital-gathering institutions;
- an extension of commerce both within and without the society;
- an increase in investment in transportation, sources of raw materials, and communications;
- the appearance of some modern manufacturing techniques;
- an expansion of education.

These changes took place at a slow rate within a society still characterized by low productivity and in which old social values and structures persisted. The key element in achieving takeoff was the development of an effective centralized nation-state.

Questions for discussion:

1. How would you define the term *entrepreneur*? The term *capital*?

SOURCE: Based on W. W. Rostow, *The Stages of Economic Growth: A Non-Communist Manifesto*, 2nd ed. (Cambridge: Cambridge University Press, 1971).

2. What six changes do traditional societies undergo as they progress toward economic development? Why are these changes important in economic development?
3. Why would the building of a nation-state be significant for economic change?

STAGE 3. TAKEOFF

Takeoff occurs when obstacles to a steady rate of growth are overcome. At this point the forces of economic progress dominate the society and growth characterizes the economy.

The requisite elements for takeoff require the buildup of investment capital, technological developments in industry and agriculture, and the emergence of political leaders with policies of economic development.

Agriculture becomes increasingly commercialized as new technology is applied to farming. Agricultural surpluses arise and become available for export. Industries expand rapidly and yield profits which, for the most part, are reinvested to expand those same industries. The expansion of industries creates a rapidly increasing demand for more factory workers. The result is an increase in the size of cities.

Questions for discussion:

1. How would you define the term *profits*? The term *surpluses* (as used above)?
2. What appears to be the relationship between political leadership and economic development?

STAGE 4. DRIVE TO MATURITY

A long period of continuous but uneven economic growth follows the takeoff stage. With technology advancing, increases in production outrace population increases. The growth of new industries accelerates at the same time that older industries "level off." Many goods that previously were imported are produced domestically. New import needs develop to furnish materials for the new industries. Social institutions and people's values change in ways that support the growth process.

Maturity is generally attained approximately forty years after the end of takeoff. Maturity is the stage in which there is balanced growth throughout the entire economy as well as the capability to move beyond the original industries that stimulated the takeoff stage. The economy begins to produce most of the things it desires.

Historically it took approximately sixty years for the complex interplay of savings, investments, capital, production, and profits to evolve into a mature economy. However, there is probably no set time limit for an economy to reach maturity.

Questions for discussion:

1. What does the term *accelerate* mean as used in this context?
2. What changes in values and institutions might take place that would serve to encourage economic growth?

STAGE 5. HIGH MASS CONSUMPTION AND BEYOND

The fifth stage is characterized by the shift of the mature economy toward the mass production of consumer goods and services. Mass production, a process involving a high volume of output per plant, usually requires large amounts of capital goods and extensive division of labor.

Real income increases to a point where a large percentage of the population can afford luxury items. In addition, the structure of the working force changes in two ways:

- The work force becomes more urbanized;
- The proportions of workers in skilled jobs and in service industries increase.

At this stage society decides to limit some technologies and apply some available resources to social welfare programs and defense. This reflects a changing of goals as the society ceases to accept the continued extension of modern technology as its most important goal. Historically, the political, economic, and social impact of the automobile has been the most important factor at this stage.

Questions for discussion:

1. How would you define the term *real income*?
2. What examples can you think of that illustrate a society's decision to apply resources to social programs?
3. What has been the political, economic, and social impact of the automobile?

Handout 4-1

DECISION-MAKING: A PHILIPPINE SCENARIO

What would you do if . . .

. . . you were a seventeen-year-old boy living in the Philippines, about fifty kilometers (thirty miles) west of Manila, the capital city? Your father rents a farm of two hectares (five acres) and grows rice. Everyone you know does the same thing year in and year out—planting, weeding, harvesting, and then waiting to start planting again.

There are ten in your family, and you all live in a three-room house made of cement blocks. You and the younger children sleep on mats on the floor of the big room. Your parents have a small sleeping room of their own; so do your older brother and his wife and baby. An older sister lives in Manila with her husband. In a small shed attached to the side of the house, your father runs a shop for selling insecticide and fertilizer.

When your parents were younger, they lived in a house made of bamboo. In those days they could grow only one crop of rice a year on their land. After they gave the landlord the half that was due him, there was just enough left to feed the family, with a little saved for seeds for the next planting season. To get more money, your father sometimes sold the fish he caught in the flooded rice fields, or your mother sold some vegetables from her garden.

Then your parents heard about some new seeds that produced more rice but needed expensive fertilizer. They decided to borrow some money to buy the seeds and fertilizer and tried them out on part of their land. Sure enough, the harvest from that part was much larger than that from the rest of the farm. Each year after that, they planted more land with the new seeds. And each year, the harvest was larger. Then your father got a loan from a bank and bought a pump. By pumping water onto the farm, he could grow a crop in the dry season as well as in the rainy season. Two crops of rice a year! Your parents' eyes still light up when they tell you about the first year that happened.

After a while your parents had saved enough money to build the house you now live in. And a few years after that, they opened the store, where you still enjoy listening to conversations between your father and the other farmers. Mostly they discuss how things have improved for them over the years and what their plans are for the next planting season.

Your parents kept you in school through the eighth grade, even though they found it difficult to pay your school fees and needed your help in the rice fields. You had to stop to give the younger children a chance to get some schooling, too. Now you have more time to help your parents, and sometimes you earn some money working as a day laborer for your neighbors.

Recently your village began to take part in a program sponsored by the Department of Agriculture. As part of the program, boys with a primary education and experience in farming are trained to be field-workers. You know a lot about farming—from what you have learned from your father, from other farmers, and from a field-worker who comes to your village from time to time. And you have been told that you would be accepted into the training program [if you applied for admission].

If you were to become a field-worker, you would have to leave home to attend a new agricultural high school in the capital of your province. You would live in a hostel there, and you would be paid enough to live on during the two years of training. After finishing, you would be paid a regular salary for your work in villages throughout the province. Then you would be able to send money home so that your younger brothers—and perhaps even your sisters—could continue in school.

This is the first time you have thought about leaving your village. You always expected to be a farmer like your father, and you know your parents are counting on you to take more responsibility for the rice fields and the store as they get older.

But you sometimes worry about sharing your father's land with your brothers when you all are adults. How can only two hectares of land provide enough food for the families you will someday have? Of course, you might do well enough to rent some other land. Or one of you might go to live with your sister and try to find work in Manila. But it still would be difficult.

Soon you must decide whether you will enroll in the training program. What would you do?

SOURCE: *The Developing World*, World Bank Educational Materials (Washington, D.C.: The World Bank, 1981), pp. 51–53; used by permission.

Handout 4-2

DECISION-MAKING: AN UPPER VOLTAN SCENARIO

What would you do if . . .

. . . you were a sixteen-year-old boy living on the outskirts of Ouagadougou, the capital of Upper Volta? You have lived there for only two years, so the village you once lived in is still clear in your mind. You remember watching your mother scratch the dusty soil around the millet plants, stir the pot over the fire, carry the baby on her back, milk the scrawny cows, and care for your blind grandfather.

You also remember the day your father came back to the village from Ouagadougou to take your family to the city. He had gone there to find work after a drought went into its third year and there was almost nothing left to eat in the village. He found a hut in a squatters' settlement and repaired it. He said that many other people in the settlement spoke your language and that you would not be lonely.

And you remember the way he led all of you to your new house through a maze of narrow, dusty lanes lined with mud houses. Surrounded by hundreds of others just like it, the hut was smaller than the one you had left. But at least there was a shed for cooking, a small space for a garden, and a pen for animals.

You now feel at home in Ouagadougou. Even though the surroundings are ugly, life is easier than it was in your village. Your father works as a night watchman. Your mother sometimes earns a little money when she can do housework in the city. But most of the time she must take care of your younger brothers and sisters and your grandfather.

For a while you had a job carrying mud in a basket from the bottom of a nearby gulley to a neighbor who was making bricks. But your neighbor finished making bricks a couple of months ago, and you have had no job since. Now and then you earn a little by running errands for shopkeepers, but you haven't been able to find a regular job. When you had your job, your family had enough money to pay for food and for the water sold by a water vendor who comes to your part of the settlement each morning. But it has been tougher for all of you since you lost your job.

A few weeks ago, some government officials held a meeting in your neighborhood. They said that the settlement you live in will be improved. New roads and footpaths will be laid out. Ditches will be dug to carry away rainwater and sewage. And pipes will be installed to bring clean water to some central points. The officials said that your father could get a loan to pay for materials to improve your house: to add a room, install a tin roof, or replace the mud floor with cement. Your father would find it difficult to pay back the loan, but he thinks he can manage if you get a job.

Since coming to Ouagadougou, you have heard people talk about Abidjan, the capital city of the Ivory Coast. Two days away by train, it is a much bigger city than Ouagadougou. People say that there are more jobs there and in the countryside nearby. The older brother of one of your friends recently sneaked onto the train and went to Abidjan. Your friend suggested that you and he might do the same thing. If you went to Abidjan, you might earn more money than you can earn in Ouagadougou. And if you could send some money back to your family, they would be better off than if you were to stay in Ouagadougou.

Your friend wants to go to Abidjan right away. What would you do?

SOURCE: *The Developing World*, World Bank Educational Materials (Washington, D.C.: The World Bank, 1981), pp. 66–67; used by permission.

Handout 4-3

DECISION-MAKING: A BOLIVIAN SCENARIO

What would you do if . . .

. . . you were a fifteen-year-old girl living in a small village on the altiplano, the high plain in the mountains of Bolivia? Your village is a couple [of] hundred kilometers north of La Paz. You have never been to the capital city, but you have heard villagers talk about the long bus trip that starts at dawn, winds down the mountains, follows the shore of Lake Titicaca, and ends at midnight in La Paz.

By working hard and long, your family manages to have just enough to eat. Your parents and two older brothers work most of the day in the potato fields. For as long as you can remember, you have helped your mother carry water from the well, sweep the house and yard, peel and cook the potatoes. You also help her to spin and weave the wool from your sheep and llamas so that you can make blankets, ponchos, and clothes for the family.

On Saturdays you usually go with your parents to the market in the square near the church in Ayata, a town eight kilometers (five miles) away. There you buy some necessities—soap, matches, sugar, and salt. Sometimes, when there is spare cash, you father . . . buy[s] beer, cigarettes, and batteries for the transistor radio. Sometimes your mother sells her weaving.

Like the other girls in the village, you started school when you were nine. Most of the boys started when they were seven. You remember the hard wooden benches and the cold, one-room schoolhouse that your father and other men of the village built, the one your little sisters now attend. You remember the teacher who talked to you in your own language, but taught you to read, write, and speak in Spanish. Your teacher told you that you were good at Spanish, and at arithmetic and writing, too.

When you finished the third grade, you were sent to the school in Ayata. So were twelve boys from the village and your girlfriend next door. But your girlfriend had to drop out after a year because her parents could not afford to pay her school fees any longer. It was cold as you walked the eight kilometers to school each morning. But it was beautiful coming back in the afternoons, when the air was clear and the glistening snow on the mountaintops was pink and gold.

Now you have finished the eighth grade, the first girl from your village ever to do so. Your parents want you to continue your schooling in La Paz. You could live with an uncle and aunt whom you have never met. With a high school diploma and your knowledge of Spanish and your own language, you might become a secretary or a primary school teacher, or you might get additional training and become a nurse.

To go to La Paz would be expensive. You would have to pay school fees, buy school books and uniforms, and give some money to your aunt and uncle for food. You would also need some money for bus fares so that you could come home to visit during holidays. Your parents tell you not to worry about the money. They can manage, they say, and in a few years you could be earning more in a month than they do in a year.

But you do worry. You know that your family would have to sacrifice a lot. You also know that your two younger sisters might not be able to go beyond the third grade—at least while you were in school. If you did get more schooling, you could help your family. But that would be many years away. And what if you did not do well in school or did not find a job when you finished?

Then there is the boy you have been fond of since you were a child. He wants you to stay in the village—to marry him one day, have many children, and live just as your parents live. You would weave ponchos and blankets, work with him in the fields, and care for your children. You would attend the festivals and go each week to the market in Ayata. You would be around people you had known all your life.

The time has come for you to make a decision. Your parents tell you that the decision is yours. What would you do?

SOURCE: *The Developing World*, World Bank Educational Materials (Washington, D.C.: The World Bank, 1981), pp. 61–63; used by permission.

Handout 4-4

DECISION-MAKING: A JAVANESE SCENARIO

What would you do if . . .

. . . you were a woman living in a village of 2,000 persons in the foothills of mountains in Central Java, the most densely populated island in Indonesia? You have spent your entire life in the rolling countryside, where rice is grown all year round in terraced fields.

Your husband owns a half hectare (about one acre) of land. Here your family grows the food you eat and some fruit and rice that can be sold at the market in a nearby town. You often work with him. So do two of your sons and a daughter, who sometimes work as day laborers for other farmers. The two younger children still are in school, but the little girl will soon stop because you cannot afford to pay both of their school fees. Besides, she will be able to do some of the work once done by your eldest son, who recently went to Jakarta, the capital city.

Your village takes part in the country's Village Development Program. Under this program, the government provides your village with some money to help make improvements that otherwise could not be made. The village council decides what improvements will be made each year and uses that money to buy the materials needed. Then people in the village volunteer to do the work. Last year, they rebuilt a bridge at the entrance to the village.

The village council is now trying to decide what it should do this year. Your husband is a member of the council, and he has been talking with you and your neighbors about possible projects. Several have been proposed, but the choice has narrowed to two projects.

One is to improve the road that leads to the market town. Part of it has to be surfaced with gravel and crushed rock so that cars, trucks, and buses will be able to use the road when the rains are heavy. The village council would use government money to buy several truckloads of rock and gravel, which the men of the village would spread out. A government engineer would show them where to make drains along the side of the road.

There are advantages and disadvantages to having the road improved. You would be able to get to the market town during the rains to go to the new health center. You have tuberculosis, as do many others in your village, and you must regularly go the health center to get medicine. But the road is a painful symbol to you. You often watched your eldest son head down the road to the market town. It was there that he first heard about life in Jakarta, where he finally went to live. You do not want your other children to leave your village. The road is temptation enough now; the temptation would be even greater if the road were improved.

The other project is to improve the system that supplies water to the two taps in the village. The storage tanks at a nearby spring are leaking and need to be rebuilt. Covers have to be installed on the tanks to keep the water from becoming polluted. The pipes carrying water to the taps leak badly, and so do the taps, which have to be relocated. With the money from the government, the council would buy new pipes, new taps, and cement for the storage tanks and covers. A government engineer would supervise all the work.

This project has advantages and disadvantages, too. Clean water would reduce the extent of intestinal disorders that affect everyone in the village. But you are worried about having the taps moved, even though you realize that the muddy area around them is a breeding ground for mosquitoes. You fill your water jug at the tap near your house every morning. Your friends are there at the same time, and you talk and exchange news with them. You are afraid that all this might change if the tap were moved to another place in the village.

Today, the village council is going to decide on the project to undertake this year. What would you do?

SOURCE: *The Developing World*, World Bank Educational Materials (Washington, D.C.: The World Bank, 1981), pp. 40–42; used by permission.

Handout 4-5

DECISION-MAKING: A URUGUAYAN SCENARIO

What would you do if . . .

. . . you were a businesswoman operating a tannery in a town in Uruguay? You grew up in Montevideo, where you attended the university and studied economics and business administration. After graduation, you married a fellow student and went to live in Paysandu, a few hundred kilometers to the north. Your father-in-law had operated a tannery there. Your husband became his partner and took over the business after his father died.

Life in Paysandu was much quieter than it was in the capital, and you missed your family. But you enjoyed learning about the operation of the tannery. You often accompanied your husband on his trips to ranches, where cattle were slaughtered and hides were prepared for shipment to the tannery. The tannery seemed noisy and smelly to you at first, but the process of cleaning, soaking, and stretching hides fascinated you.

After your children were born, you stopped traveling with your husband on business, but you often discussed his work with him. He relied on your judgment, partly because of your knowledge of business practices, partly because he felt you had such a good business sense. Then, about five years ago, he was killed in a car accident. That tragedy left the business in your hands, and soon you were absorbed in its daily operations.

For three years the business went well, but then your regular customers began to cut back on their orders. The tannery had always relied on sales to these firms, which processed hides into leather products for sale in Montevideo. It had been difficult to find other customers in the past two years, but you found enough to keep the business afloat. You know, however, that selling hides will become more difficult in the future, given the competition from other tanneries.

There are two things you can do. First, you could enlarge the business and begin to product leather products for export. The government of your country has been encouraging companies to produce more exports. It charges lower taxes to companies in the export business, and it provides those companies with various kinds of help.

You have been thinking about building a factory beside the tannery—a factory that would produce suede jackets for export. To build the factory and pay for the machinery, you would have to borrow a lot of money. You would have to hire someone to design the jackets and supervise production. You also would have to hire and train more workers. And you would have to find a trading company that would sell your jackets in other countries.

To explore this venture further, you recently went to Montevideo to find out from officials of the Ministry of Industry about the help they might give you in setting up the new factory. You learned that they would help you get a loan to build the factory and buy the machinery. They would also provide experts to help you figure out all the steps in production and to train the workers you need. And they would recommend companies that could help you with the marketing of your jackets in other countries.

The assistance offered by the Uruguayan government makes you feel less anxious about the risks of expanding your business. If you were successful, you might someday expand the factory further and produce many other kinds of processed leather goods. You would like to do this because you know that many people in Paysandu need jobs. You would also like this for your husband's sake—to take his place as a leader of the business community. All very attractive, but you still would have to put up most of your savings to get the venture off the ground. Would it be worth it?

The other thing you could do is sell the tannery. You would not have to worry about whether the business would succeed and whether you would be able to repay the loan. Instead, you could return to Montevideo: your children would like to be near their cousins, and you would like to be near your elderly parents. You would have enough money to live comfortably and to send your children to college in Europe or the United States. But you would also like to find work that is as challenging as your work at the tannery. Although you know many business people in Montevideo, you are not sure that any of them would hire you.

You must soon decide between selling the tannery or expanding its operations. What would you do?

SOURCE: *The Developing World*, World Bank Educational Materials (Washington, D.C.: The World Bank, 1981), pp. 56–58; used by permission.

Handout 4-6

DECISION-MAKING: A COSTA RICAN SCENARIO

What would you do if . . .

. . . you were a successful businessman in San Jose, Costa Rica? You sometimes smile when you remember the morning in 1950 when you first arrived in San Jose after the long bus ride from your village. Was it really thirty years ago? Your family had farmed in that village as long as anyone could remember. It was a hard life: long hours in the fields, long hours hauling irrigation water up from the well. Working together, you and your father and brothers raised only enough food for your family.

When you finished eighth grade in your village, your parents sent you to live with your uncle in San Jose so that you could continue school there. You were scared when you started at the trade school. But motors had always interested you, and you liked learning more about them. When you finished your training as an auto mechanic, you set up a small repair shop in a shed near the school. Things went well for you, and soon you rented a shop next door to one of the big hotels.

There was nothing special about repairing the car of two foreigners that day twenty years ago. But when they came back to San Jose a year later, they asked you to become an agent for their company. They wanted you to sell and repair their tractors throughout Costa Rica.

Soon you were traveling in your truck all over Costa Rica, showing farmers how to use tractors. After you sold a tractor, you returned every once in a while to service and repair it. Before long, you had ten employees, then twenty. You moved into an office with a sales room. By 1970 you had become a leading businessman in San Jose.

Through the years, you always sent money back to your family. When electricity came to your village, you bought a pump for your father and installed it in the well on his land. The pump ended the back-breaking work of hauling irrigation water up from the well. But more important, more water meant more food. Soon your family was eating more and selling surplus tomatoes. Their neighbors saw the difference the pump had made and wanted pumps, too. So you installed them for what they cost you. By 1975 many farmers in your village were producing tomatoes for sale in San Jose. Each year after that, the harvest increased.

Last week, your brother came to San Jose to tell you that this year's crop had been the best ever. But many farmers in the village had to let many of their tomatoes rot because no more could be sold in San Jose. Your brother said that people were planning to cut back on their tomato planting.

You would like to help. With your money and connections, you could set up a cannery to make tomato juice in the village. You could build a shed, install tubs and canning equipment, and have your brother manage the operations. The cannery would use all the tomatoes the farmers could grow, and some of the unemployed men and women in the village could work there. Perhaps you might one day export tomato juice to the United States.

But if you invested your money in a cannery, you would have to pull out of another business venture in San Jose. You and some other businessmen have recently talked about starting a new vocational school. An architect has designed a building, and you have interviewed several persons who might become the school's director. You are proud of the reputation you enjoy in San Jose, and the vocational school is only one of many things you could do to help people in your adopted city. So many people in Costa Rica need vocational training. You know what a difference it made in your life thirty years ago.

Tomorrow you and the other businessmen plan to meet to continue your discussions. What would you do?

SOURCE: *The Developing World*, World Bank Educational Materials (Washington, D.C.: The World Bank, 1981), pp. 45–47; used by permission.

Handout 4-7

DECISION-MAKING: THE PERSONAL PERSPECTIVE

Directions: You are to read and report to your group about the decision the person in the story you are assigned must make. Formulate answers to the following in order to prepare your report to your group.

1. Based on knowledge you derived from previous lessons is this economy a barely developing, a quickly developing, or a developed economy?
2. Briefly characterize the life of the person in the story.
3. What decision must the person make?
4. List all of the person's alternatives, and describe the positive and negative implications of each.
5. If you were that person, what choice would you make? Be prepared to justify your selection.
6. What impact might your choice have upon the economic development of the area in which the scenario is set?
7. What issue in economic development does this story illustrate?

From *Analyzing Growth Policies of Developing Countries: A Resource Guide*, EPS Series. 1983. Published by the Joint Council on Economic Education, 1212 Avenue of the Americas, New York, New York 10036.

Handout 4-8

ECONOMIC DECISION-MAKING: GROUP SUMMARY

	Economic Classification	Economic Factors Involved	Alternatives	Group Decision (note dissent, if any)	Implications of Decision
Philip-pines					
Upper Volta					
Bolivia					
Java					
Uruguay					
Costa Rica					

From *Analyzing Growth Policies of Developing Countries: A Resource Guide*, EPS Series. 1983. Published by the Joint Council on Economic Education, 1212 Avenue of the Americas, New York, New York 10036.

Handout 5-1

TWO POINTS OF VIEW: GLOBAL 2000

GLOBAL 2000[a]

There will be a 90 percent increase in world food production from 1970–2000 while at the same time there will be a per capita increase of less than 15 percent. However, per capita food consumption in South Asia, the Middle East and the LDC's of Africa will scarcely improve or will actually decline below present inadequate levels. The bulk of the increased food production will go to countries that [already] have high per person food consumption.

During the same period from 1970–2000 there will be a 95 percent increase in the real price of food. Food output in LDC's will "barely keep ahead of population growth" and the outlook for improved diets for the poorest people in the poorest LDC's is sobering.

ANOTHER POINT OF VIEW[b]

In our view, about 300 million people now live in countries which are desperately poor and unlikely to improve much in the next decade or two. Examples are Bangladesh, the Sahel [region] of Africa, Haiti and Bolivia. About 700 million additional people live in what we call "coping" poor countries: Such nations are not doing badly as a whole but many of their citizens are very poor; India, northeastern Brazil and the peasantry of Mexico are examples. As the world's population grows from the current 4.3 billion and levels out around 10 billion in the middle of the Twenty-First Century, about a billion people will almost surely be very badly off. These problems are both very important and very difficult to deal with. But they will have little relevance for the great majority of the world's population. . . .

As for real food prices, the world price for wheat and corn in constant dollars was roughly the same in 1977–1979 as it was in 1967–1969, despite sharp increases in 1973–1975. Such fluctuations can recur, and are indeed likely. . . . But a continuing rise in real terms has not occurred, nor is it particularly likely. While food prices in real terms are likely to go up in the immediate future, there is little reason to expect a long-term rise. . . .

This is not to argue that many millions in poor countries do not suffer from malnutrition. Fortunately, however, various technologies could solve or alleviate most of the world's nutritional problems in a few years. Their adoption has often depended upon effective demand, i.e., demand with money behind it. If there is any single cause of world hunger, it is poverty, not a lack of food. Thus, the problem is financial rather than simple production.

---

[a] *The Global 2000 Report to the President* (Washington, D.C.: Government Printing Office, 1980).

[b] Excerpted from "Globaloney 2000," by Herman Kahn and Ernest Schneider, *Policy Review*, Spring 1981, pp. 133, 141, and 143. Used with permission of the Heritage Foundation, publisher of *Policy Review*. Kahn is director of the Hudson Institute and Schneider is a staff member there.

Handout 5-2

THE ENGINEERING OF DEVELOPMENT

The prerequisite for economic progress for the underdeveloped countries today is not essentially different from what it was in Great Britain at the time of the Industrial Revolution, or what it was in Russia in 1917. To grow, an underdeveloped economy must build capital.

How is a starving country able to build capital? When 80 percent of a country is scrabbling on the land for a bare subsistence, how can it divert its energies to building dams and roads, ditches and houses, railroad embankments and factories, which, however indispensable for progress tomorrow, cannot be eaten today? If our postage-stamp farmers [in Egypt] were to halt work on their tiny unproductive plots and go to work on a great project like, say, the Aswan Dam, who would feed them? Whence would come the necessary food to sustain these capital workers?

At first sight, the problem looks insuperable. If an underdeveloped country is to amass capital, it will have to swing labor from agricultural tasks to capital-building tasks. But when a country can barely feed itself, how can it make this switch?

At second look, however, the prospect is not quite so bleak. These economies do have unemployed factors, and a large number of peasants who till the fields are not feeding themselves. They are, also, in a sense, taking food from one another's mouths.

As we have seen, the crowding of peasants on the land in these areas has resulted in a diminution of agricultural productivity far below that of the advanced countries. Hence, the abundance of peasants working in the fields obscures the fact that a smaller number of peasants, with little more equipment—could raise a total output just as large. Twenty years ago an observer wrote: "An experiment carried out near Cairo by the American College seems to suggest that the present output, or something closely approaching it, could be produced by about half the present rural population in Egypt." Here is an extreme case, but it still applies, to some degree, to nearly every underdeveloped land.

Now we begin to see an answer to the predicament of the underdeveloped societies. In nearly all these societies, there exists a disguised and hidden surplus of labor that, if it were taken off the land, could be used to build capital. Most emphatically, this does not mean that the rural population should be literally moved, en masse, to the cities where there is already a hideous lump of indigestible unemployment. It means, rather, that the inefficient scale of agriculture conceals a reservoir of both labor and the food to feed that labor if it were elsewhere employed. By raising the productivity of the tillers of the soil, a work force can be made available for the building of roads and dams, while this "transfer" to capital building need not result in a diminution of agricultural output.

This rationalization of agriculture is not the only requirement for growth. When agricultural productivity is enhanced by the creation of larger farms (or by improved techniques on existing farms), part of the ensuing larger output per man must be saved. In other words, the peasant who remains on the soil cannot enjoy his enhanced productivity by raising his standard of living and eating up all his larger crop. Instead, the gain in output per cultivator must be siphoned off the farm. It must be "saved" by the peasant cultivator and shared with his formerly unproductive cousins, nephews, sons, and daughters who are not at work on capital-building projects. We do not expect a hungry peasant to do this voluntarily. Rather, by taxation or exaction, the government of an underdeveloped land must arrange for this indispensable transfer. Thus, in the early stages of a successful development program, there is apt to be no visible rise in the individual peasant's food consumption, although there must be a rise in his food production. What is apt to be visible is a more or less efficient—and sometimes harsh—mechanism for assuring that some portion of this newly added productivity is not consumed on the farm but is made available to support the capital-building worker. We see here the problem that caused the Russian planners such trouble in the early days of Soviet industrialization.

What we have just outlined is not, let us repeat, a formula for immediate action. In many underdeveloped lands, as we have seen, the countryside already crawls with unemployment, and to create, overnight, a large and efficient farming operation would create an intolerable social situation. We should think of the process we have just outlined as a long-term blueprint that covers the course of development over many years. It shows us—as did our earlier model—that the process of development takes the form of a huge internal migration from agricultural pursuits, where labor is wasted, to industrial and other pursuits, where it can yield a net contribution to the nation's progress.

SOURCE: Robert L. Heilbroner, THE MAKING OF ECONOMIC SOCIETY: Revised for the 1980s, 6th ed., © 1980, pp. 245–247. Reprinted by permission of Prentice-Hall, Inc., Englewood Cliffs, N.J.

Handout 5-3

PROPOSALS FOR IMPROVING FOOD PRODUCTION IN DEVELOPING COUNTRIES

The following was taken from a 1981 letter by Douglas Ensminger, professor emeritus of rural sociology at the University of Missouri-Columbia, to M. Peter McPherson, administrator of the Agency for International Development (AID), U.S. Department of State.

. . . I am writing to share with you what I think have been some of the significant conclusions to be drawn from the past three decades, conclusions with implications in selecting agriculture and food-related program strategies for the decade ahead.

Hypothesis 1. One of the most important conclusions is that food to feed the people is not so much a production problem as it is a problem of gross inequalities in the developing countries.

Hypothesis 2. Hunger has its roots in poverty. People are poor because they are denied either access to production resources or opportunities to work and earn enough to meet basic human needs.

Hypothesis 3. Food, hunger, poverty, and population are all interrelated.

Hypothesis 4. While plans are conceived in material, economic and social terms, their achievement necessitates that all development be accepted as being first and foremost human resource development. Only as people become self-reliant and self-respecting will the material and economic components of development be achieved.

Hypothesis 5. The selection of technology in the future must be accepted as an ethical issue. One criterion must be whether it will contribute to a more just society.

Hypothesis 6. The implementation of land and institutional reforms and the development of trustworthy institutions to serve all segments of agricultural and rural development must be prerequisites for achieving enough food and for opening up opportunities for the tillers of uneconomic land holdings and landless laborers to become economically and socially self-reliant. Only then can they achieve sufficient food for their families.

Hypothesis 7. The backdrop influencing all phases of development must be understood and accepted as being the process of transforming traditional societies and moving them toward modern societies. In realizing this, we must accept that it will take a long time for change to occur and development goals to be achieved. While some goals can be achieved within a decade, the basic and fundamental cultural changes must be viewed as requiring generations.

After reflection on these conclusions and examining a number of possible program strategies, it would seem that the strategy most appropriate would be this: an interrelated approach to food, hunger, poverty and population issues within a rural program development. . . .

SOURCE: From *Agenda*, October 1981, p. 3.

Visual 6-1

POPULATION FACT SHEET: WHAT DOES IT MEAN?

- From the first appearance of humans to early historical times, the population grew at a rate of 0.002% or 20 persons per year per million of population.

- During the period 1650–1750 the annual population growth rate was 0.3% or 3,000 per million.

- From 1850–1900 the population grew at a rate of 0.6% or 6,000 per million.

- Over a ten-year period from 1930 to 1940 the population growth rate was 1.0% or 10,000 per million.

- Most of the richest countries are now experiencing a population growth rate of about 1.0% a year or less.

- Growth rates among many poorer countries range from 2.0% to 2.5% or 3.0% a year.

SOURCE: Based on *Economics in Society: Third World Economies*, by Suzanne Wiggins Helburn et al. (Menlo Park, Calif.: Addison-Wesley Publishing Company, 1977), Table 23.

Visual 6-2

WORLD POPULATION GROWTH: PAST AND PRESENT

Year	Estimated Population (in millions)	Estimated Annual Percent Increase in the Intervening Period
About 10,000 B.C.	5	–
A.D. 1	250	0.04
1650	545	0.04
1750	728	0.29
1800	906	0.45
1850	1,171	0.53
1900	1,608	0.65
1950	2,486	0.91
1970	3,632	2.09
1974	3,900	2.10
1982	4,585	1.70

From *Analyzing Growth Policies of Developing Countries: A Resource Guide*, EPS Series. 1983. Published by the Joint Council on Economic Education, 1212 Avenue of the Americas, New York, New York 10036.

Handout 6-1

THE WORLD'S POPULATION, 1982

Region or Country	Population Estimate, mid-1982 (millions)	Birth Rate (per 1000)	Death Rate (per 1000)	Annual Rate of Natural Increase (%)	Population "Doubling Time" in Years at *current* rate	Population Projected to Year 2000 (millions)	Infant Mortality Rate (per 1000 live births)	Population under Age 15 (%)	Population over Age 64(%)	Life Expectancy at Birth (years)	Urban Population (%)	Labor Force Engaged in Agriculture (%)	Per Capita GNP, 1980 (US$)	Physical Quality of Life Index (PQLI)
World	4,585	29	11	1.7	40	6,082	85	35	6	60	37	46	2,620	68
More developed	1,152	15	10	0.6	116	1,248	20	23	11	72	69	13	8,130	92
Less developed	3,434	33	12	2.1	33	4,835	96	39	4	57	26	60	680	55
Africa	498	46	17	2.9	24	847	121	45	3	49	28	66	770	33
Northern Africa	117	44	13	3.1	22	190	110	43	3	54	43	52	1,110	41
Western Africa	150	49	19	3.0	23	265	140	46	3	47	22	64	750	26
Eastern Africa	141	48	18	3.0	23	246	112	46	3	47	15	78	310	32
Middle Africa	56	46	20	2.6	27	90	122	44	3	45	30	75	370	27
Southern Africa	34	37	12	2.5	28	55	98	42	4	59	47	35	2,120	52
Asia	2,671	30	11	1.9	37	3,528	91	36	4	58	23	59	920	58
Middle South Asia	988	38	16	2.2	32	1,396	125	41	3	49	22	64	230	40
Southeast Asia	374	34	12	2.2	32	519	86	42	3	53	23	65	580	56
East Asia	1,204	21	7	1.4	50	1,441	41	31	6	66	22	54	1,330	74
North America	256	16	9	0.7	95	286	12	23	11	74	74	4	11,240	95
Latin America	378	32	8	2.3	30	549	67	40	4	63	63	40	1,910	71
Middle America	95	33	7	2.6	26	142	60	43	3	64	60	42	1,840	72
Caribbean	30	27	7	1.8	38	41	62	38	6	66	52	39	1,540	73
Tropical South America	209	33	9	2.4	28	313	74	41	3	62	62	37	1,890	67
Temperate South America	43	24	8	1.5	45	53	40	29	7	68	82	14	2,360	83
Europe	488	14	10	0.4	187	511	16	23	13	72	69	16	7,990	93
Northern Europe	82	13	11	0.2	352	84	11	22	14	73	74	5	9,020	95
Western Europe	154	12	11	0.2	423	155	11	21	14	73	81	7	12,600	95
Eastern Europe	111	17	11	0.6	117	120	21	23	12	71	59	28	4,390	92
Southern Europe	141	14	9	0.5	131	152	19	25	11	72	61	23	5,090	89
USSR	270	18	10	0.8	88	302	36	24	10	69	62	17	4,550	91
Oceania	24	21	9	1.3	55	30	42	31	8	69	72	20	7,600	86

SOURCE: All the data except for the PQL index are from *1982 World Population Data Sheet*, Population Reference Bureau, Inc. (Washington, D.C., April 1982). The PQL index is compiled by the Overseas Development Council and was taken from the *1979 World Population Data Sheet*.

*The numbers differ somewhat from those that would be obtained using the procedure described in step 1 of the Teaching Strategy for this lesson because the figures shown here were calculated with unrounded data.